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The Mothers' Manual

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The Mothers' Manual

A MONTH BY MONTH GUIDE
FOR YOUNG MOTHERS

By

Emelyn Lincoln Coolidge, M.D.

Visiting Physician of the Out-Patient Department of the Babies' Hospital, New York; formerly House Physician of the Babies' Hospital, New York; Physician in Charge of the Babies' Clinic of the Society of the Lying-In Hospital of the City of New York.

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1904

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April

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1904

Dedicated to

MISS MARIANNA WHEELER

Superintendent of the Babies' Hospital of New York City

IN GRATEFUL APPRECIATION

OF ALL

SHE HAS TAUGHT THE

AUTHOR

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PROBABLY no being in the world is ever so conscious of helpless inability to confront an alarming situation, as is the young mother left alone with her first child. While the nurse remains in charge of babe and mother, the little sovereign in the cradle is not so formidable, but when she withdraws from the scene of action, the condition is beset with difficulty. In her inexperience the most devoted mother may make some fatal mistake. She neither knows what to do nor what to leave undone. One's profoundest sympathy is always with the novice in baby-tending whose baby must be cared for, she knows not how.

The author of *The Mothers' Manual* has presented in these pages, with singular clearness and brevity, precisely the information for which the young mother asks.

Dr. Emelyn L. Coolidge has won her acknowledged eminence and wide reputation, during her connection with the Babies' Hospital of New

York. She has written most acceptably for mothers, in the *Ladies' Home Journal,* and in this volume she has gathered the results of years of study and practice. Facts rather than theories concern the mother in the nursery, and Dr. Coolidge comes to her bringing facts, so charmingly and lucidly arranged that they make agreeable reading while composing a handbook of perennial value.

This little book does not conclude when the infant has learned to walk and talk, and so has acquired a measure of independence. The diet, clothing, sleep, exercise, outings, and general management of infancy constitute a portion of these chapters, but babies grow into boys and girls, and their early years have a bearing on their whole after life. Dr. Coolidge will prove herself a friendly mentor up to the hour when children emerge from babyhood into the sturdier period of the kindergarten and primary school.

Health is the ideal state of childhood, yet various diseases lie in wait to interrupt it in the home, and seriously to deplete the physical capi-

tal which is as a reserve stock in every vigorous man and woman. The foundation for robust maturity is laid in the first seven years of life, and the mother is wise who is armed at every point, knowing what to do in little juvenile ailments, and guarding against perilous maladies.

With the utmost confidence that not a line of this book is other than trustworthy and immediately helpful, as well as in touch with the latest developments of medical science, *The Mothers' Manual* is sent forth to the mothers of America.

MARGARET E. SANGSTER.

CHAPTER ONE

THE FIRST MONTH

Weight, measurements, and general description of the normal baby. The cry. Food. Care of bottles and nipples. Bathing and dressing. Sore navel. Sore eyes. Colic.

THE average healthy baby should weigh at birth seven to seven and a half pounds, but during the first week he generally loses a few ounces, then he begins to gain at the rate of four to six ounces a week; if he does not gain, something is wrong, hence the necessity of weighing him once a week throughout babyhood.

The best kind of scales for weighing a baby are those that have a scoop and platform and can be used with weights. They are the variety most often seen in grocery stores, and can be bought for three dollars. Scales having a dial

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and needle are much less satisfactory and more expensive. If such scales are used, it is very difficult to keep a young baby perfectly quiet long enough to read the weight indicated by the needle. The baby should always have all his clothing removed when he is weighed. It is a good plan to weigh a soft afghan or small shawl, and then keep it for the express purpose of wrapping about the baby when he is weighed. The infant should be weighed always at the same time of day; the best time is just before his morning bath. If a baby is weighed sometimes just before a meal and then at another time just after, there will be a difference of several ounces in his weight, and the mother will be unable to tell whether the child is really gaining or not. When weighing the baby he should be wrapped in the shawl and then carefully placed in the scoop of the scales, the scales should then be balanced, the exact weight noted, the baby removed from the scoop, and the weight of the shawl subtracted from the total weight. In this way baby's correct weight may be determined.

The head of a new-born infant should measure about fourteen inches in circumference, his chest thirteen and a half inches, and he should be twenty and a half to twenty-one inches long. Variations in both weight and measurement are common, and unless very much out of the way should not cause undue alarm.

The child will be sensitive to light even the first day, therefore be careful not to allow the sun to shine in his eyes nor leave him in a room flooded with gaslight. The first day the infant will be deaf, but then his power of hearing will develop and be unusually acute throughout infancy, hence he should not be disturbed by sudden, sharp noises; he will not mind ordinary household sounds. It is doubtful whether the new-born baby has the sense of smell; nor is the sense of touch present at first; he soon learns to taste, however.

The young baby's skin should be like velvet, and is generally bright red. It may change to yellow for a few days, but this soon passes off. Frequently the skin peels in flakes, called " des-

quamation of the newly born." The fine, soft hair with which the head is covered, usually comes out and will be replaced later by a second growth, often darker than the first.

The fontanelle, or "soft spot" on top of the child's head, is open and pulsates as the heart beats: be very careful not to touch this spot roughly or allow anything to hit it. Sometimes the head is very much out of shape or has a swelling on one side; this will soon disappear, and by gentle manipulation the head can be molded into a pretty shape. Do not allow baby to lie too long in one position, as the soft skull may become flattened or all the hair rubbed off in one spot. Sometimes even little sores will develop if the child lies too long in a single position.

The navel cord should be dusted with bismuth subnitrate, kept very clean and wrapped in linen, which is held in place by the flannel binder: it drops off from the fifth to the tenth day.

The baby will now sleep about nine-tenths of the time, but he should be waked regularly for his food and kept awake while taking it. After

a short time it will not be necessary to waken the child—he will wake of his own accord almost with clocklike regularity when mealtime approaches. It is a very bad plan to allow a nursing or bottle fed baby to sleep while taking his food. If this is allowed, he does not get all the nourishment he should have, and the intervals between his meals are made too short. Then, if the child is bottle fed the milk is apt to grow cold and cause colic. On the other hand, he should not be allowed to take his meal very hurriedly, in five or six minutes, for if this is done the child is apt to regurgitate his food, or he may have hiccoughs. When a child tries to nurse too rapidly the breast or nipple should be taken away for a minute and then resumed again. Fifteen or twenty minutes is the proper length of time which a baby should consume while taking a meal.

The first two or three days the evacuations of the bowels will be soft and dark, after this there should be three or four soft, smooth, yellow movements a day. Baby's water should be col-

orless and passed from six to ten times a day. If the child is a boy the doctor should be asked if circumcision is necessary, and if it is, the operation should be performed within the first two weeks if possible, for it will save much trouble later. The foreskin should be gently pushed back every day and the parts carefully washed, removing all small white particles.

A certain amount of crying is absolutely necessary for a baby if he is to be strong and healthy; this is the only way a baby can exercise his lungs. Under no circumstances should he be given "soothing syrups" to quiet him.

A young mother will soon learn to tell the cry of pain: it is strong, sharp, but not continuous, often accompanied by contractions of the features and drawing up of the legs. The cry of hunger is a continuous, fretful sound after feeding, or some time before the next meal. If the child is a nursing baby, be sure the supply of milk is plentiful, and have a little examined by the doctor to see if it is strong enough to suit the baby's needs. A bottle baby who cries from

hunger should have the amount of food made greater and the strength a little increased. The cry of a really sick child is feeble and whining. The cry of temper or indulgence is loud and strong, accompanied by kicking or stiffening of the body. It can be easily told, for when the baby gets what he wants he at once stops.

The cry of temper should never be given in to or the mother will regret it later. Baby's training must be begun from the first day. He should not be rocked to sleep, trotted, nor walked the floor with, allowed to suck his thumb or a "pacifier"; all of these habits will soon have to be broken, so why begin them? He needs all the love he can get, but he should be made a happy little blessing and not a naughty little tyrant.

As soon as he has had his first bath the infant should be placed at the breast if the mother is rested enough to receive him. Unless there is some very good reason to the contrary, a mother should nurse her own baby. During the first few days very little milk is secreted, but the child should be given the breast four or five times

daily. He needs this first substance that is secreted, and it is also good for the mother to try to nurse the child as soon as possible. The baby may have a little pure boiled water between nursings, but no herb teas of any kind either now or later. By the third day the supply of milk is usually well established and the baby should be nursed regularly every two hours up to 10 P. M. and twice at night. He must not sleep in his mother's bed, but have a crib and be taken to her at mealtimes. There is danger of a young baby being smothered if he sleeps in the same bed with his mother.

The above rules apply also to a bottle-fed baby, the food given being cow's milk properly modified. There are a great many different methods and formulæ for modifying milk; those described by Drs. Holt, Kerly, Chapin, and Miss Marianna Wheeler[1] are among the best. Although not highly scientific, a very simple method, and

[1] "The Care and Feeding of Children," L. Emmett Holt; "Short Talks with Young Mothers," C. G Kerly; "The Theory and Practice of Infant Feeding," H. D. Chapin; "The Baby, His Care and Training," Marianna Wheeler.

one which has been used successfully by many young mothers, is the following: From a quart bottle of pure milk carefully skim off the top six ounces, add to this twenty-four ounces of boiled water in which are dissolved three teaspoonfuls of granulated or six of milk sugar and a pinch of bicarbonate of soda, or else one and a half ounces of lime water. All these ingredients should be well mixed, and then the correct quantity for each meal poured into each of ten clean nursing bottles. The bottles should then be tightly corked with clean cotton and the food pasteurized or heated to a temperature of 155° F.

A regular pasteurizer may be bought for three dollars, or the bottles may be stood in a pot of cold water which is rapidly brought to the boiling point, the pot is then at once removed from the fire and the bottles allowed to stand in it for half an hour; they should then be taken out and cooled as quickly as possible by allowing first warm and then cold water to run over the outsides of the bottles. When they are cold they should be placed on ice or kept below 50° F. until

mealtime, when one of the bottles should be warmed by placing it in warm water. When the milk in the bottle is just lukewarm the cotton cork should be removed and the rubber nipple attached.

For the first week of life one to two and a half ounces should be placed in each of the ten bottles and two to three and a half ounces for the rest of the first month. This formula is intended only for the first month.

If the baby vomits or has curds in his movements, use a little less cream and a little more water—no rule can be given that will suit every baby. By making all the food for twenty-four hours up at one time, the mother will save a great deal of trouble and the food will be quite as good as if made fresh every time. Two tablespoonfuls equal one ounce.

Whether the baby is breast or bottle fed he should have his mouth washed out before he is fed. If he is a breast-fed child the mother's nipples should also be wiped off with a little boric-acid solution.

Too much care cannot be taken of bottles and nipples. Round, cylindrical bottles having ounces marked on them should be used, and black rubber nipples. As soon as the meal has been finished the bottle should be rinsed out with cold water and allowed to stand full of cold water in which is a small pinch of borax or soda. Before the food is made up for the day all the bottles should be thoroughly washed in hot soapsuds and then rinsed and boiled in clear water for ten minutes.

The nipples should be rinsed in first cold and then hot water, and then allowed to stand in a covered cup of boric-acid solution or borax water. Once or twice each day they should be turned inside out and scrubbed with a brush and hot water. If the nipples are boiled they often swell so much that they cannot long be used. It is best to have two or three nipples in use at one time, taking first one and then the other.

The hole in the nipple should be just large enough to allow the milk to drop through when the bottle is inverted. It should never be large enough for the milk to pour through in a stream.

The best way to make the hole in the nipple is to take a rather coarse cambric needle and heat it red hot, then make the hole in the nipple the proper size.

Do not wait for the navel cord to drop off before beginning baby's tub bath. It should be given from the first day, and unless there is some very good reason for omitting it, it should be continued every morning throughout babyhood.

If possible, the bath should be given in front of an open fire; have the temperature of the room 70° to 72° F., and keep off all draughts by means of a large screen. See that everything needed is close at hand before beginning to give the bath. For a bathtub a folding rubber one is to be preferred, next a papier-maché one, or if tin must be used, place a piece of flannel in the tub to protect baby from the cold, hard tin. Unless the tub is already on a stand it will be best to let it rest on a low table.

Another low table should be placed on the right of the person who is to give the bath; on this table should be the baby basket, containing a

soft brush and fine comb, a pincushion full of different sizes of safety pins, and several threaded needles, a thimble, squares of soft linen, absorbent cotton, wooden toothpicks, a powder box and puff or else a powder shaker, containing pure talcum powder, a small pair of blunt-pointed scissors, a box of bismuth subnitrate, one of cold cream, and one of white vaseline.

Standing beside the basket on the table should be a soap dish containing castile or one of the pure French soaps, a cup of a saturated solution of boric acid, two cheese-cloth washcloths, a soft towel, a bath thermometer, several toothpicks on which a little absorbent cotton is firmly twisted, and the rolled flannel band. Beside the basket there should be a basin containing warm water 98° to 100° F., and within easy reach a pitcher of hot and one of cold water. The tub should be at least three-quarters full of warm water 98° to 100° F.

On a rack near the fire, but within reach of the person who is to give the bath, should be hung the baby's clothes. Besides the roller band the

baby will need a medium-weight woolen shirt having high neck and long sleeves, a small, soft, cotton bird's-eye diaper folded inside of a larger one of the same material, a flannel skirt about thirty-two inches long, and made on a wide flannel band in winter or a cotton one in summer, a plain white nainsook slip or dress which should not be more than thirty inches long, a pair of closely knit socks, and in very cold weather a little flannel jacket to be worn over the thin dress. Long white skirts are not necessary for every-day wear and only add weight to the baby's clothing. Some prefer a flannel skirt made after the "Gertrude" pattern, but those made on a band seem to me better; they do not wrinkle so easily and do not allow the cold air to creep up underneath like a more loosely fitting garment.

The person who is to give the baby his bath should sit in a low chair and wear a large flannel bathing apron, to the belt of which a long, soft towel is pinned with safety pins; this towel should be pushed to one side until needed later.

Everything now in readiness, the baby should be taken on the lap and undressed, then covered with the flannel apron; his face should first be bathed with water from the basin on the table, but no soap, the washcloth should then be soaped and the child's head and scalp carefully washed and rinsed, then face and head should be thoroughly dried; next, by putting the hand under the bath apron, in which the baby is wrapped, the entire body should be carefully gone over with soap and warm water from the basin, gently rolling the baby from side to side in order to reach the back; after this gently lift him into the clear warm water in the bathtub, use a fresh washcloth and thoroughly rinse off all the soap on his little body, allowing him to remain in the tub only a minute or two; he should then be placed on the towel which covers the bath apron in the bather's lap, covered with the long end of the towel and bath apron and gently patted all over; use the other towel on the table to dry all the little folds of flesh, then slip out the wet towel on which he has been lying, and still keeping him

covered with the apron, dust a little talcum powder in his neck and groins, and a little bismuth about the cord (until it drops off), wrap it in linen and put on the rolled flannel band. The band should be long enough to go once and a half around the baby's body, and should be basted on the left side. The diaper and shirt should next be put on, then the socks, then the flannel skirt, the band of which should also be basted on the left side, the skirt should then be turned up at the bottom and pinned with two safety pins so as to come just above the hem of the dress; then put the dress on over the infant's feet, not over the head, and lastly the sack.

When baby is dressed brush his hair, then wrapping a small piece of absorbent cotton around the little finger, dip it in the boric-acid solution and gently wipe out the child's mouth; wet another piece of absorbent cotton in boric-acid solution, and, holding open the eyelid, squeeze a little of the solution into baby's eyes and gently wash the lids and lashes; use a separate piece of cotton for each eye always.

Next take one of the wooden toothpicks on which the cotton is twisted, dip it in the boric-acid solution and carefully clean the nose, removing all secretions that can be easily seen; do the same with the ears, but do not go far into the opening, for this is dangerous. The nails should be cleaned with one of the wooden toothpicks and cut, not bitten, off, if necessary.

Although this bath seems quite an undertaking to an inexperienced young mother, after a little practice it can be given with great ease, and in twenty minutes or half an hour at the most. Never give a bath directly after a meal or just before the baby is to be taken out. One should wait at least an hour after a meal has been taken before the bath is given, and half an hour or an hour after the bath before taking the child out.

At night the baby should have a warm sponge bath and have a fresh band, shirt, and skirt put on. In winter he should sleep in a flannel night-dress which is made with a drawing string or buttons on the bottom, so that he cannot expose

his feet. In summer a cotton nightdress may be used, and after the third month the skirt may be left off in very warm weather.

HOW TO TAKE CARE OF A SORE NAVEL

If the navel is not properly cared for, it is apt to become sore and must be promptly treated, or else blood poisoning may set in. When it looks red or has a thin discharge coming from it, wash it carefully at least twice daily with a saturated solution of boric acid, or, if pus is present, use a 1-5000 solution of bichloride of mercury. Dust a powder composed of salicylic acid one part, starch nineteen parts, on it. If it does not promptly heal, call the doctor's attention to it.

WHAT TO DO FOR SORE EYES

Should there be any secretion of pus from baby's eyes, even ever so slight, wash them out as described above every hour, or even oftener if pus is seen; never allow it to collect. A special syringe, like a blunt-pointed dropper, is made for

this purpose. When this simple remedy does not effect a speedy cure it will be necessary to use more vigorous means, and a doctor should be consulted at once. After treating baby's eyes the hands should be thoroughly scrubbed with hot water and soap.

COLIC

During the first few months some babies are apt to have attacks of colic, often caused by indigestion. The child screams sharply, draws up his legs, and usually has a hard, tense abdomen. First warm his hands and feet, and turn him on his stomach, letting him lie on a hot-water bottle or hot piece of flannel. Gently pat his back to help up the wind, and give him a little hot water by means of a medicine dropper; a few drops of essence of peppermint may be added to the water. Do not give him gin or herb teas.

If the attacks are frequent the food is probably too strong; use less cream or milk and more water when making up the food, or if the child is breast fed, give an ounce of hot water just

before nursing the baby. The mother's diet should also be carefully regulated; she should take some exercise out of doors, if possible, and try not to be nervous. Cereals, cocoa, milk, eggs, gruels made of corn and oatmeal, most fresh fruits and vegetables, with some meat, make a good diet for a nursing mother.

The mother must invariably have a free movement of the bowels each day.

CHAPTER TWO

THE SECOND MONTH

Early development. Airing the baby. The nursery. The crib. Use of toilet chair. Water. Food formula. Care of diapers. Thrush. Chafing. Rupture.

DURING the second month the baby evidences signs of awakening intelligence; he begins to show pleasure by smiling, and will turn his head in the direction of a sound.

It is now undoubtedly a great temptation for the mother and admiring relatives to talk to the baby pretty constantly, shake rattles and other toys before him, and pass him about from one person to the other. But be careful and moderate in the indulgence of these pleasures, or the baby will grow nervous and irritable.

The nervous system of an infant is extremely

delicate, and must never be forced to develop. The brain grows as much during the first year as during all the rest of life; hence it requires quiet and rest, and should never be forced into undue activity. The poor little infant (especially if he be the first one) is often so tired and bewildered by the well-meant, but misguided, attentions of older people, that if he could speak he would beg for a quiet hour, and be perfectly happy if left alone with his own little hands and toes for his sole amusement.

It is a well-known fact that babies of the very poor are less nervous than those of the wealthy, and this is largely due to the fact that their mothers are too busy to constantly entertain them.

Babies often enjoy the companionship of children far more than that of adults, for children a little older than the baby are nearer his own level and look at life more from the baby's own standpoint. Unless there is some disease of the nervous system babies are not "born nervous," and although they may inherit a tendency to ner-

vousness it can easily be corrected during the early months of life, if the child is fed regularly on proper food, allowed to sleep enough, and left to develop quietly by himself, instead of being urged and forced by adults.

Fresh air is of almost as much importance to babies as food, and the sooner they grow accustomed to it the better it will be. In winter a baby may commence his airings in the house when four or five weeks old; in summer he may go out of doors as early as his second or third week, if the weather is warm.

When baby is to take his airings in the house dress him as if he were to go out in the street, then place him in his crib or in a large clothes-basket on the bed, but not on the floor; open the windows from the top; of course, the child should not lie in a direct draught, and this is much easier to avoid if the windows are opened from the top and not from the bottom. He should at first be aired this way for twenty minutes, gradually increasing the length of time each day to one or even two hours.

A hot-water bag may be placed at his feet, and his hands protected with woolen mittens; a light blanket or afghan should be thrown over him. This airing should be given in the warmest hours of the day and in the sun, if possible, but turn the baby's back to the light so that the full glare of the sun shall not shine in his face. A child early accustomed to fresh air will take cold much less easily than one who is confined in hot, close rooms.

The nursery should be a large, high-studded room having plenty of sun and an open fire, if possible. Everything in the nursery should be washable; painted walls, which may be washed down occasionally, are much better than wall paper. No heavy carpets or upholstered furniture should be allowed here, and the room should be kept scrupulously clean and dusted each day with a damp cloth.

At least twice a day the nursery should be thoroughly aired—in the morning after baby's bath, and before he is put to bed at night. During the winter, while baby is so young, the sleep-

ing room may be ventilated at night by leaving a window open in an adjoining room, or, if the weather is not very severe, a window board may be used, or a frame on which is tacked heavy muslin; this may be from one to two feet high and shut into the window like an ordinary mosquito screen. In summer the window may be left open without any other means of protection than a screen around the baby's crib.

As before mentioned the baby must sleep in a crib of his own, and not in the bed with his mother or anyone else. An iron or brass crib without rockers is the best variety to select, and is much better than a bassinet covered with draperies which catch all the dust. A screen or a plain white curtain of some wash material may be used to keep off possible draughts. If one cannot afford a regular crib for the child, he may sleep, while very young, in a large clothes-basket placed on two chairs.

The crib should have a good woven-wire mattress, and on top of this should be placed a pair of heavy army blankets folded so as to fit the

wire mattress; next a square of rubber or other waterproof material, then a cotton sheet, a quilted pad, a second sheet, a pair of wool crib blankets, and a light counterpane, which should be removed at night, a down comforter or afghan taking its place in cold weather.

The baby's pillow should be about one inch high and made of hair, never of feathers or down. Great care should be taken to thoroughly air the baby's bedclothes, and the heavy army blanket should be washed occasionally. On bright, sunny days let the blanket hang on the line out of doors for an hour or two. In this way the blanket can be kept much cleaner than a mattress, and will be quite as comfortable for the baby until he is three years old at least.

Never put the baby in a cold bed; warm the sheets before the fire just before the child is put to bed, or place a hot-water bag between them.

By the time the baby enters his second month he may wear simple little "Bishop" dresses instead of the plain slips he wore at first. All his dresses should be very plain and made of

fine material, the only trimming being a few fine tucks or a little hem-stitching, feather-stitching, or a very little narrow embroidery at wrist and neck. A lot of ruffles and heavy embroidery or coarse lace always look very much out of place on a baby and are in bad taste. These dresses should not be over thirty or thirty-two inches at the most, and may be even shorter.

The baby is now old enough to be taught to use his chair and not to soil his napkin. A small chamber should be placed in the mother's lap and the child held on it, care being taken to support his head and back. This should be done at exactly the same hours every day, in the morning and afternoon, directly after a meal. This training should be persevered in; the position alone often goes a great way in helping to overcome constipation or any tendency to irregularity of the bowels that may exist. I have known many babies trained this way who never soiled a napkin after the eighth week. Of course, they cannot be taught not to wet a napkin until they are some months older.

Do not forget that the baby needs water quite as much as the adult; a fresh supply should be boiled and cooled every day, and kept in a covered dish or bottle. A little—one ounce—should be offered to the baby between each meal. It may be given from a spoon, medicine dropper, or taken from a nursing bottle, and either hot or cold. This also helps to overcome constipation, and with a breast-fed baby it teaches him to take a meal from a nursing bottle, which is of the greatest benefit in case of sudden weaning from the breast becoming a necessity.

During the second month the baby should be fed every two and a half hours during the day, having eight meals in twenty-four hours of three to four and a half ounces at each meal. At night he should be fed at 10 P. M. and 2 A. M. His food, if he is a bottle-fed baby, should be prepared as for the first month as regards pasteurizing, cooling, etc. But the proportion of milk in the formula should be increased. The following formula is often used for babies of this age:

From the top of a quart bottle of milk skim off the top six ounces, now pour off three ounces of milk and mix them with the top milk, making nine ounces in all; add to this twenty-four ounces of boiled water in which have been dissolved four teaspoonfuls of granulated sugar or six of milk sugar; add a pinch of salt and a pinch of bicarbonate of soda, or else two ounces of lime water.

THE CARE OF DIAPERS

A diaper should never be used more than once without washing. Remove at once when wet or soiled, and place in a covered pail in the bath room and wash at the first opportunity. Pure white soap only should be used for this washing, then the diapers should be thoroughly rinsed and boiled. They should be dried in the open air in the sun when possible, and never before the nursery fire. Before they are put on the baby they should be warmed.

THRUSH

Thrush or sprue is often seen in the mouths

of young babies. It is most often caused by uncleanliness or carelessness in the care of bottles and nipples. In very delicate or marasmus babies it may develop independently of these causes. Babies who are allowed to suck a "pacifier," or a rag with sugar in it, are especially apt to have this disease.

In appearance thrush is like little white curds of milk scattered over the mouth, the inside of the cheek, tongue, and lips, but, unlike milk, it cannot be rubbed off easily. It may cause so much discomfort that the baby will not nurse; in such a case it will be necessary to feed him with a dropper or spoon until the mouth is healed.

To cure thrush faithful and very gentle treatment is necessary. Twist a piece of absorbent cotton around the little finger, dip it in a solution of boric acid (one teaspoonful to a pint of water), and very gently wash out the baby's mouth four or five times daily. After each meal wash the mouth out with a solution of bicarbonate of soda (one teaspoonful to a cup of

water). Never use honey and borax, or any other sweetened preparation, for they only aggravate the disease.

Be sure the bottles and nipples are properly cared for, and burn the "pacifier" if one has been used—and never replace it.

CHAFING

Chafing is one of the most common and annoying troubles that a young infant has to endure. It may be caused by allowing the child to lie in a wet diaper, not drying the folds of flesh properly, too much or too strong soap in the bath or on the diapers when they are washed, or by a failure to properly wash the child after he has been on his chair. Some babies in a weak condition are very apt to chafe on the slightest provocation, and because such babies often have sprue also, mothers sometimes think that the chafing is the "sprue coming through."

The most frequent places for chafing are on the buttocks, in the folds of the neck, and in the groins.

When the baby is chafed do not use soap on the affected parts, but wash them with water in which a bran bag has been squeezed, or use pure olive oil and no water at all. Very carefully dry all the parts with old, soft linen, and dust them with a powder composed of equal parts of starch and talcum with one-fourth as much boric acid, all thoroughly mixed together. A powder composed of pure stearate of zinc compound is also excellent; if this does not heal the parts, sop on a one per cent. solution of ichthyol and then use the powder. Keep a little piece of soft linen between the folds of the flesh, so that they are not irritated by constantly rubbing together.

RUPTURE

If the abdominal band has not been put on properly, or the cord has not been well treated, there is often a slight rupture at the navel. Crying seldom causes this trouble if the band has been properly put on. Remember it should be snug but not tight, long enough to go once and a half around the child's abdomen, and

neatly sewed on the left side. It should never be pinned, for pins often become unfastened, and it is also easier for the band to become wrinkled.

When a rupture occurs a ring at the navel may be felt through which a mass protrudes; when the baby cries it grows larger, and when he stops it often will become very small again.

Ruptures should be treated very promptly, as soon as noticed. It is best to have a doctor or trained nurse show the mother how to apply the rupture strap, but if the mother cannot obtain help, she may put on the strap herself in the following manner:

Take a strip of oxide of zinc adhesive plaster about an inch and a half wide, and long enough to reach three-quarters around the baby's body; attach one end of this plaster to one side of the child's abdomen and with the other hand gently, but firmly, push back the rupture, and bring the skin on either side of it together so that it shall meet and fold in the rupture; now bring over the plaster right across the ab-

domen so that it holds the folds of flesh over the rupture together, and firmly attach it to the other side of the abdomen. This dressing should be changed every two days and should be continued until the rupture has entirely healed.

Other forms of rupture in the groin should receive prompt treatment from a doctor, for they are dangerous if allowed to continue.

CHAPTER THREE

THE THIRD MONTH

General development. Knit band. The baby carriage. Cereal added to food. Recipes for gruels and food formula. Vaccination. Colds. Croup. Vomiting. Projecting Ears.

AN ordinarily bright baby three months old will recognize his mother or nurse, and will smile and "coo" when she approaches; he will also hold his head up quite steadily if his back is supported, and will often reach out his hand for a bright object.

His sense of touch is now quite acute and he is often particular about the temperature of his food, refusing to take it if it is a little too cold or too hot. Now, for the first time, the tear glands become active, and the baby cries with tears.

If the infant weighed seven and a half pounds at birth he should now weigh eleven or twelve pounds, but if he falls a little below this average weight there is no cause for worry, as long as his gain is steady.

At the end of the third month the flannel band may be discarded and a ribbed knit one used in its place. One which has shoulder straps is a little better than one without, for the band is not so apt to slip out of place, and then, in intensely hot summer weather, it may at times serve as a shirt as well as a band. It is safer to leave a shirt off on a very hot day than it is to leave off the band, which fits more snugly and protects the abdomen, where lie the delicate organs of digestion. The band should be of wool in winter and silk and wool in summer. It should be put on over the child's feet, not over his head, when he is dressed each morning, and be changed for a fresh one at night.

A perfectly healthy baby born in winter may begin to go out of doors in March, if the days are mild, but he should not be taken out in a

cold, strong wind. Begin by letting him stay out for half an hour in the warmest part of the day, then an hour, etc., until he becomes accustomed to the outdoor air. Never take a young baby out when there is much melting snow on the ground, or when the thermometer is below 20° F.; let him take his airing in the house instead, on such days.

A comfortable baby carriage is better for the child than to be carried in the mother's or nurse's arms, for he can be kept warmer. It is really economy to buy a good-sized, substantial baby carriage; the English make is best on account of the hood, which protects the child from the wind.

While the child is so young he should lie out straight on a heavy, folded blanket, or hair pillow, having a small, thin pillow under his head; near his feet should be a hot-water bag; a light woolen blanket or afghan should be put into the carriage and the baby placed upon it, then it should be carefully wrapped around him, and the outer carriage robe tucked in. These wraps

may be modified to suit the weather. Babies who lie on one fur rug and are covered by another are apt to be in a dripping perspiration most of the time, and hence take cold very easily.

If the carriage has a parasol, it should be lined with green and adjusted so as to keep the sun out of the child's face. When crossing the street let the carriage gently down on the back wheels first, and this will prevent a sudden jerking forward of the baby's body. There is no harm in allowing the baby to sleep out of doors in cold weather, if he is kept warm.

In cold weather the baby's cloak should be lined with flannel or lamb's wool, and his cap should have a flannel lining also. On his hands he should wear woolen mittens. A veil is not necessary, and is often very uncomfortable, as it gets wet by the baby's lips or by his sucking it. If he is protected by the parasol, that is all that is necessary.

It is now the proper time to add a cereal of some kind to the baby's food, if he is a bottle-fed baby. Either barley or oatmeal is the best

one to use. When making these gruels it is much easier to use the flour than the grain. Barley gruel is made by rubbing up one teaspoonful of the flour with a little cold water, then stirring this into a pint of boiling water, adding a pinch of salt and boiling it fifteen minutes; it should be strained if at all lumpy. Oatmeal gruel is made in the same way, only using two teaspoonfuls of the flour instead of one.

If it is impossible to obtain the flour the grain may be used, taking two tablespoonfuls of the barley, or three of the oatmeal, and allowing it to soak in cold water over night. The next morning add one quart of cold water and boil steadily down to one pint, for about four hours, then strain through muslin. Gruel should be made fresh each day and kept on ice. Use barley gruel unless the child is inclined to be constipated, and then use oatmeal.

Some doctors strongly advise the use of a substance[1] which will convert the starch in the gruels into sugar; in cases of a delicate digestion

[1] "Cereo," The Cereo Co., Tappan, N. Y.

I think it is wise to use one of these substances, but in the case of ordinarily robust children it seems to me that they do just as well without any such aid to digestion.

The proportions of milk, gruel, etc., often used for the third month are as follows: Skim from off the top of a quart bottle of milk the upper six ounces, then pour off six more ounces, making twelve ounces in all; now add twelve ounces of boiled water in which are dissolved three teaspoonfuls of granulated, or six of milk sugar, and a pinch of bicarbonate of soda or else two ounces of lime water; then add twelve ounces of barley or oatmeal gruel. The food should continue to be pasteurized, cooled, etc., throughout the first year, according to directions already given.

The baby should now have eight meals in twenty-four hours, of three ounces and a half to four ounces and a half at each meal. He should be fed regularly every three hours up to 10 P. M., then have one meal at 2 or 3 A. M., and nothing more until 7 A. M.

VACCINATION

At the end of his third month the baby ought to be vaccinated by a physician. Infants are likely to contract smallpox if exposed, and every baby should be vaccinated as a precautionary measure. It is also well to have the vaccination over before the baby begins to cut his teeth.

Opinions differ as to whether the baby should be vaccinated on his arm or leg; in little girls the scar on the arm is often objected to. Before children can walk about, I prefer to vaccinate them on the leg, for the wound can be more easily cared for and is often less painful to the child when it is necessary to handle the sore member in dressing and undressing. If done on the leg the outer side of the calf should be chosen.

A mother should never try to vaccinate her own child, nor allow anyone else to do so except a physician. Perfectly fresh, pure vaccine virus should be used; usually in two or three days the vaccination will show signs of "taking," and

by the fifth or sixth day a well-defined vesicle will be seen. A clean piece of soft linen should be kept over the spot and held in place by a gauze bandage; this dressing must be changed every day or two. If there is much inflammation, the linen may be wet with a boric-acid solution or other antiseptic wash ordered by the doctor; if the linen sticks to the sore badly, a little carbolized vaseline or a little boric-acid powder may be used.

The little scab which forms usually stays on about three weeks, and then drops off, leaving a scar underneath. If vaccination shields are worn, they should be of the kind which resemble corn plasters and are open at the top; they are made of felt and have a large hole cut in the center. Some babies do not seem to mind the vaccination in the least, while others are fretful, and have more or less fever at times, but the disturbance generally ceases after the tenth or twelfth day.

COLDS

Some babies seem to take cold on the slightest provocation. This is often due to the fact that they have been kept in too warm a room or have been clothed too warmly; they then get easily overheated and feel the slightest draught of air. At night keep the nursery at a temperature of 60° to 65° F.; in the daytime at 68° to 70° F. Have the nursery thermometer hung about the level of the baby's head when he is in his crib.

When the baby has a cold and his nose seems to be stopped up, twist a piece of cotton on a wooden toothpick, dip it in olive oil, and insert it a little way into each nostril. A preparation of oleo-stearate of zinc and a special dropper for use with it may be bought at some drug stores, and is excellent to use for the baby's nose when it is troublesome during a cold. If the trouble is so great that the baby nurses with difficulty, buy a nose syringe having a soft rubber tip, and syringe out the nose once or twice daily with the following: Half a teaspoonful of boric-acid pow-

der, one ounce of glycerin, and eight ounces of warm water.

In order to syringe out a child's nose, place him in your lap, with his back against your chest, then bend his head well forward, and syringe first one nostril, then the other.

When the baby coughs, or has much wheezing in his chest, a mustard plaster will sometimes do a great deal to relieve him. To make this plaster take one part of mustard to six parts of flour, mix it into a smooth paste with a little cold water, and spread it between two layers of muslin, then warm it by holding it near the fire or moisten it with a little hot water just before it is placed on the baby's chest. Leave it on only long enough to redden the skin, which will usually take about five or six minutes. The best time to put on a plaster of this kind is just before the baby goes to bed at night. Under no circumstances should he be taken out directly after a plaster has been put on.

The baby should not be given cough syrups or other medicines liable to upset his diges-

tion unless they are specially ordered by a doctor.

CROUP

Croup is a thing dreaded by most mothers, but although it is certainly distressing, simple spasmodic croup is not often dangerous. It usually makes its appearance suddenly, and often at night. The baby may have had a cold or have had some unusual exposure, or there may not have been any especial cause that the mother can think of for the sudden attack.

The symptoms of croup are known to almost everyone—a dry, barking cough, with more or less difficulty in breathing, and a distressed look on the face of the little sufferer seldom forgotten, if once seen.

Wring out pieces of flannel in hot water and put them on the child's throat as hot as they can be borne, changing them from time to time as they grow cold. Make a tent over the baby's crib by means of an open umbrella, over which a large sheet is spread; then place a croup kettle or a tea kettle close to the crib, directing the

steam under the sheet into the tent, so that the baby may inhale it, but taking care not to burn him. This will usually afford more relief than anything else that can be done. If the attack is a severe one give ten drops of the syrup of ipecac every fifteen minutes until the child vomits, and send at once for a doctor. A teaspoonful of castor oil should also be given, or if the child has not recently had a free movement from the bowels, it will be wise to give an injection of soapsuds and warm water, for it is important to have the bowels open at such a time. It is much wiser not to take a baby out of doors the day after he has had an attack of croup.

VOMITING

Vomiting, or even regurgitation of food, by a young infant should not be regarded as "only natural," and hence no attention paid to it; it is not natural for a healthy baby to vomit frequently, and if he does so something is wrong.

When a baby vomits examine his bands to see if they are too tight, for if they press too

much on a full stomach, vomiting is apt to be the result. Then inquire whether he has been rocked or danced about directly after a meal, or sucks his fingers. If the vomiting cannot be accounted for by any of these causes, there is most likely something wrong with the food or the manner of giving it.

If the baby vomits directly after a meal, and the milk comes up looking just about as it did when it went down, the child is probably being overfed. Reduce the quantity given at each meal, and if this does not help matters make the interval between each meal a little longer.

If the vomiting takes place half an hour or more after the feeding, and the milk comes up in sour-smelling masses, it usually means that the child is getting food too rich in cream. Use less of the top milk or cream when making up the formula; or if, after trying this, the vomiting still continues, leave out all of the top milk and make the food up with plain milk and water or gruel. A breast-fed baby who vomits or has curds in his movements may be given an ounce

or two of boiled water or barley water just before he is nursed, then nursed only ten or fifteen minutes, and the intervals between feedings may be made a little longer than they have been.

When the vomiting is accompanied by diarrhea stop all milk at once and give a teaspoonful of castor oil, then feed the baby on barley water until the doctor comes, when his directions should be followed.

When there is vomiting with colic, and the stools contain many curds, the formula which is being used is too strong for this particular baby. Go back to a formula that has been used for one of the previous months until one is found that can be properly digested, or, if the doctor approves, peptonize the milk for a short time until the baby's digestive organs become stronger. Peptonizing should not be continued any great length of time, however, for the organs become so accustomed to having their work done for them that they will after a while cease to work properly for themselves.

Should the baby reject his food with great force, or have what is called "projectile vomiting," send at once for a doctor, for this is not caused by indigestion, but means something more serious.

When there is much mucus vomited with the food a thorough stomach washing, with hot water and a pinch of bicarbonate of soda, will often help the child more than anything else that can possibly be done, and if the doctor wishes to do this the mother should not be alarmed or make any objection, for the operation is entirely painless and a very simple one to perform. It will do more good than quarts of medicine, which usually only makes matters worse.

PROJECTING EARS

Many otherwise pretty babies are made ugly by the fact that their ears stand out from their heads a considerable distance. While the child is very young is the time, if ever, to correct this trouble. A skeleton cap especially made for this purpose may be bought in a children's clothing

store in New York City for $1.25, or, if the mother is unable to procure one of these, she may make one herself out of thin lawn or pieces of broad tape, but in order to do any good it must fit very snugly and be worn for some little time.

CHAPTER FOUR

THE FOURTH MONTH

Development. Kissing the baby. Early exercise. Playing with babies. Food formula. Whooping cough. Earache. Hiccoughs. Enlarged glands.

FOLLOWING the normal development of our baby, we find him at the age of four months able to hold his head erect without support. He now begins to use his hands much better than he has yet done, and seems to have found the value of his little thumb when taking hold of objects.

Instead of moving his arms and hands about in a perfectly aimless fashion he now shows that his brain is beginning to control, to some extent at least, his movements. He will often grasp an attractive object, and after looking at it or putting it in his mouth, he will throw it on

the floor and expect someone to pick it up for him.

When carrying the baby about the house change him from one arm to the other occasionally, so that if he wishes to use his hands each one of them may be exercised equally. In after-years it will be a great advantage to him, if he can use one hand as well as the other.

Frequently by the end of the fourth month the baby will show signs of fear. If a stranger enters the room and attempts to take him, he will often scream and not be pacified until his mother or nurse holds him in her arms. It is well to accustom babies to the sight of strangers, but let them get a little used to the new person before allowing that person to hold the child.

So many well-meaning people rush up to a young infant, talk nonsense in a loud voice or cover him with kisses, no wonder the baby screams with fright.

Never under any circumstances allow the baby to be kissed on the mouth. Tuberculosis, diphtheria, and many other dreadful diseases are

contracted in this way. It is no doubt a great temptation to kiss a sweet little infant, but think of his best good, and choose the little hand for the caress.

It is an excellent plan to let the baby lie in the center of a large bed, draw up his long skirts, and allow him to kick his little legs about for half an hour or so every day; sometimes change his position, and let him lie on his stomach for a while; this will bring into play the muscles of the lower extremities and so help to strengthen him.

Place a blanket and some pillows in a large clothes-basket and prop the baby up in a half-sitting position for a little while each day, beginning with fifteen minutes at a time; then half an hour, etc. This is much better than constantly holding the child in one's arms.

The baby may now be played with a little for a short time every day, but never just before bedtime. The best time to play with a baby is just after his morning nap. Do not allow him to be tossed violently into the air in order to make him laugh and crow; remember how tender and

delicate a little creature he is, and be gentle when handling or playing with him.

If the mother is nursing her baby, and he has never had a bottle, it is now time to begin to give him one each day. Some doctors even advise one bottle-feeding a day from the very start of an infant's life. Should the mother's milk then suddenly fail, or should she be obliged to leave the child for a short time, there will be no struggle, which would be especially hard for the baby if it happened to be in hot weather.

By very gradually accustoming the digestive organs to cow's milk the danger of a bad attack of indigestion, when the child must be weaned, is lessened to a great degree, and is generally obviated entirely.

A baby who has always been breast fed cannot take nearly so strong a formula as one who has never had anything but cow's milk from the beginning of his life. Hence, commence by giving the baby of four months one meal a day of a formula prescribed for a bottle baby one month old. To calculate the amount necessary for one

or two meals a day only, take one-eighth or one-fourth of the separate ingredients mentioned in the formula, then there will be very little waste.

First give the baby three ounces of the formula; then, if all goes well, after a day or two let him have three and a half ounces, instead of one meal from the breast; if all goes well, at the end of a week give him three ounces of a formula suitable for a baby two months old; then wait a few days and give him four ounces of this formula. Now wait a week and give him the same amount of a formula suited for a three-months-old child. Keep him on this for a week, then increase the quantity to four ounces and a half. Then, if there are no signs of indigestion after another week has passed, give him four ounces of a formula used for the fourth month, and if he cries for the bottle after emptying it eagerly, wait a day or two and increase the amount to four and a half ounces, and then to five ounces. As he grows older, now give him the formula and amount usually taken by bottle-fed infants of a corresponding age.

Should the baby vomit, have curds in his movements, or have colic, keep him on a weak formula for a longer period than advised above.

A baby who has always been bottle fed, and who is digesting his food well, should now be able to take a formula composed of the following: Six ounces of top milk skimmed from the top of a quart bottle of milk, six ounces of milk poured off, twenty-four ounces of barley or oatmeal gruel, six teaspoonfuls of milk sugar or three of granulated sugar, a pinch of salt, and a pinch of bicarbonate of soda.[1] He should have four or five ounces of this every three hours up to 9 or 10 P. M., then one meal only between that time and 6 or 7 A. M.

WHOOPING COUGH

Whooping cough is more likely to be contracted by young infants than almost any other contagious disease. It is thought to be more

[1] When lime water is used instead of soda, take one ounce of lime water to each twenty of the milk and gruel.

prevalent during the spring months than at other seasons of the year.

If the baby has been exposed to whooping cough, and he is going to contract the disease, he will probably do so within three weeks after the exposure. It usually begins like an ordinary cold, with a cough, this stage lasting one week or ten days. Then the second or paroxysmal stage begins; the child will have a series of short coughs, then a long-drawn inspiration with the peculiar sound called the "whoop." In young infants the "whoop" is entirely absent at times.

During the attacks of coughing the infant will generally become very red or even black in the face and frequently will vomit at the close of the attack. In the case of babies this vomiting is the most serious thing about whooping cough, for it is difficult to make them retain sufficient nourishment to keep them from growing weak and thin. It is a good plan to feed the child a little stronger food, and less of it, every two hours; he will then have a chance to absorb at least a little of the nourishment be-

tween the attacks and will not be quite so apt to vomit as if a larger amount of the food were given. If the child is much prostrated and the attacks are very frequent, even this two-hour interval need not be rigidly adhered to, but a little food given at the close of each attack, otherwise there may be danger of a collapse from insufficient nourishment.

Some form of beef extract or Liquid Peptonoids should also be given between feedings, as the nourishment and stimulation exerted by these are really needed. If there are signs of indigestion, it is a good plan to peptonize the food for a time at least.

Drugs taken internally do not often help the child very much, and frequently upset the digestion; they should always be prescribed by a physician, if given at all.

A small lamp especially made for the purpose, and which vaporizes a medicated fluid, is excellent to keep burning in the room, especially at night.[1]

[1] Vapo-cresolene lamp.

On bright days the baby may go out of doors, but should be kept away from other children.

After two weeks the paroxysms are generally less severe and less frequent, but the cough will often continue to some degree from three to five months. Sometimes a change of air will help to shorten the disease. If the child can be taken away, choose the mountains or inland country rather than the seashore.

If the baby vomits on his clothing or on the floor, disinfect the articles with a solution of carbolic acid one part and water forty parts.

While the germ of whooping cough does not remain in the room as long as that of scarlet fever, it is well at the close of the disease to fumigate the clothing and room in which the child has spent most of his time and slept. Either sulphur candles or formaline pastilles are the simplest to use for fumigation. Directions for use will come with them, but if sulphur is used, be sure to have plenty of water about.

Hang several very wet sheets about the room; sprinkle water on the floor, and let some stand about in open vessels. Be sure all the cracks of doors and windows are tightly stopped up with cotton, and if there is a fireplace or register in the room paste large, thick pieces of paper over it. Leave the room closed for ten or twelve hours, then open it, and air thoroughly for six or eight hours more. Wipe off all the furniture, pictures, etc., with a damp cloth which has been wrung out of the above-named solution of carbolic acid.

EARACHE

Many young babies suffer greatly from earache without the cause being suspected. This is often the case after a cold or an attack of bronchitis or pneumonia, and sometimes takes place when the child is teething. If the child screams sharply, presses his head against his mother or nurse, or pulls at his ear as if it hurt him, then earache may be suspected. If pressure just in front of the ear causes the baby to jump as if

in great pain and to cry out, there is probably something wrong with the ear.

Heat is by far the best remedy for earache. Let the child lie with his ear against a covered hot-water bag, or heat a flannel over a lamp and place it against his ear, changing it often so as to keep it very hot. If this does not help, try syringing the ear with very hot water of a temperature of 105° to 110° F. Do not use a poultice or blister unless the doctor especially orders it. As soon as possible after the first attack of pain the baby should be taken to a doctor, and a careful examination of his ears should be made. Much unnecessary deafness would be avoided, if this were done by all young mothers.

HICCOUGHS

Some babies seem especially liable to hiccoughs. This is really of not much importance, being simply a spasmodic contraction of the diaphragm, often caused by wind, gas, or too much food in the baby's stomach. It is, however, annoying and should not be allowed to continue indefinitely.

Pat the baby gently, but suddenly, on his back, give him a little hot water in which are a few grains of sugar or a drop of essence of peppermint, and be careful that he does not take his food too quickly or suck an empty bottle. The neck of the bottle should always be kept full of milk when the baby is taking his food and thus avoid his sucking in wind.

ENLARGED GLANDS

When a baby is beginning to cut his teeth, or sometimes after a bad cold or from some other causes the glands at the sides of the neck may enlarge. Often this will give little or no discomfort to the child, but the young mother will be considerably worried and puzzled.

Frequently the enlargement will disappear of itself, but sometimes the gland will continue to grow larger, get quite hard and sometimes much inflamed; matter or pus will then form and the gland break down and discharge.

As soon as the mother notices a steady increase in the size of a gland she should consult her

physician, and if the gland needs lancing allow him to do it at the proper time. If this is done the resulting scar will be very much smaller than if the gland is allowed to break of itself.

CHAPTER FIVE

THE FIFTH MONTH

Weight. Toys. Sleep. Teething. Short clothes. Food formula. Constipation. Milk crust. Boils.

AN average normal baby five months old generally doubles his birth weight at this time. He is now a bright, lively little person and may be allowed to sit in a semi-upright position in his baby carriage or even in a chair, for a short time each day.

When sitting in a chair be sure to have him tied in carefully and place a soft pad or pillow at his back to give him a little support. He will enjoy exercising a little on the bed or in a large clothes basket greatly, and may even have a few simple toys, one at a time, to play with. Let him amuse himself with these, and do not tire his brain by shaking rattles and such things at him.

He will enjoy the toys twice as much, if he is allowed to discover their attractions for himself.

The baby's naps now grow gradually shorter, but he should take two a day; a long one of two or three hours in the morning and a shorter one of about an hour in the early afternoon. If allowed to sleep very late in the afternoon, he will not be so apt to sleep as well at night. He now laughs out loud and often very heartily.

At this time the flow of saliva usually becomes very much increased, and the baby "drools." This is a sign that the teeth are beginning to attempt to push their way through the gums. Baby will bite his finger and put everything he can get hold of into his mouth. If the child has never had the thumb-sucking habit, be careful that he does not form it now. Should he show a tendency to do it, put a small bag on his hand or dip his thumb in a solution of quinine or aloes.

A piece of cardboard bound on the arm, and long enough to reach a little above and below the elbow so that the arm cannot be bent, will often

prove an effective means of preventing thumb-sucking when other methods fail. The habit of thumb-sucking is not only an ugly one, but it spoils the shape of the mouth and finger.

A special cracker is now made in the form of a ring; it is quite hard and is composed largely of malt sugar and is intended for teething babies to bite on. As they can get very little, if anything, off of it, such a cracker will do no harm and may be given to the baby in preference to ivory or rubber rings, which often do more harm than good by hardening the gums and so making it more difficult for the teeth to push their way through them.

If the baby "drools" much, he is apt to quickly wet through any little bib he may wear, and so take cold by having damp clothing next to his chest. A material[1] now made, which is waterproof, but not so heavy as rubber and without the odor rubber is apt to have, may be very useful at this time. If a piece of it is cut the shape of the bib and bound with tape, it may then be worn

[1] Linite, made by Johnson & Johnson, New Brunswick, N. J.

underneath the bib and prevent the clothing from becoming wet.

There are twenty teeth in the first set, and the first most often to appear are the two lower central incisors; they are generally cut at any time from the fifth to the ninth month. When a baby is teething there is sometimes slight fever, restlessness, or even several sleepless nights, occasionally there is loss of appetite and some indigestion; but many of these ills attributed to teething are really due to faulty feeding. Never force the child to take his food if he does not want it, even if he refuses an entire bottle or two.

If any signs of indigestion are seen, pour out an ounce or two of the regular food and replace it with an equal amount of boiled water. If the child is a nursing baby, give him an ounce of boiled water just before he is nursed, and then nurse him for ten or fifteen minutes only, instead of the usual twenty minutes.

When the baby is restless at night, a warm sponge bath will often quiet him. Should he have any fever add a tablespoonful of alcohol to

a basin of warm water, or a teaspoonful of bicarbonate of soda may be used, then the sponge bath be given. When the gums are very much congested and swollen and the child seems really to suffer, ask the doctor to examine the gums and lance them if he thinks it wise. Great relief is often afforded by this means and sometimes considerable pain is avoided, because the congestion is so much lessened.

At the beginning of the fifth month it is time to begin to prepare the baby's first short clothes. It is always wiser not to make the change from long to short clothes during very cold weather; if the baby is born at such a time as to make it necessary, he may even be put into short clothing as early as the end of his third or fourth month, rather than to wait until later and then have to make the change in the middle of winter.

The short clothes should consist of a shirt, knit band with shoulder straps, flannel skirt made on a cotton waist in summer, or a flannel one for cold weather and having a row of small flat buttons onto which the white petticoat may

be buttoned, a diaper, and a simple white dress. White cotton stockings should be worn in summer or woolen ones in winter. These should be long enough to be pinned to the diaper. Either moccasins or soft kid shoes should be worn for the first shoes. The fad of allowing babies to go with legs and feet bare is a very foolish one. Their little legs and feet are apt to become cold, and then a bad attack of colic or indigestion results. It seems to me this method of "toughening" a baby cannot be too strongly condemned, especially in a changeable climate. The first short clothes should reach just above the ankle and half a dozen of each article will usually be needed; if more can be had, so much the better.

At night a baby in short clothes should sleep in a shirt, band, diaper, and nightdress made of cotton in the summer or flannel in winter.

The baby's night feeding should now be dispensed with; he should be taught to sleep from 10 P. M. to 6 or 7 A. M. There may be one or two nights of crying and a struggle at first when the usual night meal is stopped, but if the

baby finds he cannot have his bottle he will soon learn to sleep without waking for it.

Feed him now every three hours during the day, making his last meal come at 10 P. M. Give him five to six ounces and a half at each meal, making six meals in twenty-four hours. The following proportions are often used at this time: from the top of a quart bottle of milk skim off six ounces of top milk, then pour off nine ounces of milk and mix with the top milk; add to this twenty-four ounces of barley or oatmeal gruel, a pinch of salt, four teaspoonfuls of granulated sugar or seven of milk sugar, a pinch of bicarbonate of soda, and proceed as for former months.

CONSTIPATION

Constipation is one of the most frequent and most trying troubles to which many infants (and children) are subject. It may be caused by many different things, such as inheritance, malformation of the rectum or other parts, weakness of the intestinal walls, errors in the food, etc.

The treatment depends on the cause and differs a good deal in a nursing or a bottle-fed baby. If the mother is nursing her baby and he is constipated, she should at once look into her own habits of life and see if the cause does not lie there. She should take at the very least two hours' exercise in the open air each day; be sure to secure a movement of her own bowels every day, even if she has to take some mild laxative. She should drink plenty of pure, rich milk, cocoa, oatmeal and cornmeal gruels, water, and take some form of malt tonic with her meals. She should avoid tea and coffee. Fruit, most green vegetables, and some meat are excellent, but she should not eat very abundantly of starchy foods.

Sometimes a nursing baby will be constipated because he does not get enough food to form a residue in his intestines. If this is the case, he will seldom gain in weight. Try giving him one or two meals per day of modified milk made up with oatmeal gruel as a substitute for the same number of meals from the breast. Be sure to give him plenty of pure water between his meals.

A teaspoonful of cream in a little hot water, given just before nursing, will often help to make his bowels more regular, or a teaspoonful or two of beef juice may be given night and morning. After the sixth month a little orange or prune juice may also be tried.

A bottle-fed baby who is constipated is often easier to treat. Add a little more top milk or cream to each bottle than the formula calls for; use oatmeal gruel when making up the food; if the milk supply is of the best and purest do not pasteurize the food, and never use lime water, but use bicarbonate of soda instead. Lime water is often very constipating. Malted food may be added to each bottle for a short time.

When all of these methods fail then other measures will have to be taken. Sometimes a very little stimulant to the rectum is all that is needed. Hold the baby over a small chamber at exactly the same time and after a meal every day, and insert a small cone of oiled paper a little way into the rectum, or use a small castile soap suppository. In a few days after this treatment the

bowels will often form a habit of moving regularly by themselves. Gluten suppositories will also prove of great benefit in some cases, but glycerin ones are too irritating for frequent use.

The child should not be allowed to go more than twenty-four hours without a movement. An enema of sweet oil, one to two tablespoonfuls, may be given with a bulb syringe, or half a teaspoonful of glycerin in an ounce of warm water or half a pint of warm soapsuds, but do not give an injection every day unless especially ordered by a doctor.

Massage of the baby's abdomen will often help. Have your hand warm, begin at the right groin and with your fingers make a series of circular movements lightly at first, and then pressing down deeper as the child grows used to it; gradually work your way up to the ribs, then across and down the left side to the left groin. This should be repeated twice daily for eight or ten minutes at a time and always at the same time of day, but never directly after a meal.

A mother may safely give a constipated baby from twenty drops to a teaspoonful of olive oil once or twice daily, but do not give castor oil for constipation, as after its first action it leaves the child more constipated than ever.

There are numerous drugs and medicated suppositories that are used, but they always should be ordered by a doctor for each separate case. Try any or all of the remedies here suggested before giving the child drugs that may cause him to vomit or otherwise upset him. Sometimes, when all treatment fails, the trouble will right itself as soon as the child can run about and is old enough to take a more varied diet.

"MILK CRUST"

This is a disease often seen in infants and young children. It is due to an inflammation of the little sebaceous glands of the skin. It most often occurs on the scalp, and when present the hair should be cut as short as possible before treatment is begun, otherwise the treatment will do very little good. The crusts

should first be softened with warm olive oil; or vaseline may be left on the scalp over night, then the crusts washed off with warm water and castile soap.

An ointment made of either vaseline or cold cream and two per cent. resorcin should be applied after the crust is removed. This ointment should be spread on linen and held in place by a thin cap. Every day wash off the ointment with olive oil and apply fresh salve. Do not use water oftener than once a week.

BOILS

Young babies are sometimes quite subject to boils. These may be caused by a low condition of the blood or from some infection from without. A frequent seat for them is the head, neck, or back. If they occur where there is hair, it must be cut very close before the treatment is begun. Boils should be opened early and all the pus allowed to escape; then some mild antiseptic dressing, such as boric acid or a weak solution of bichloride of mercury, should be applied.

If allowed to open spontaneously the boils are apt to last longer than if lanced early. The baby often needs iron, hypophosphites, or some other tonic, and a good doctor should be asked to prescribe one.

CHAPTER SIX

THE SIXTH MONTH

Intelligence. Weight. The baby's summer. Food formula. Receipt for mutton broth. Summer complaint. Convulsions. Prickly heat.

THE average baby at six months of age weighs from fifteen to sixteen pounds. During the second half of his first year the baby will not gain quite so much each week as he did during the first half. From two to four ounces is generally the amount gained each week at this time. In very hot weather the gain in weight is less and may cease entirely for a short time.

The baby should now sleep about two-thirds of the time and continue to show signs of increasing intelligence. If mother, father, or the nurse is called, he will frequently look at the person

named and seem to recognize him or her. As he is now in short clothes he will greatly enjoy rolling about on a wide bed and may even attempt to creep a little.

As the mortality among infants is greater in hot weather than in cold, the baby's summer—either the first or second one—is a thing to be considered.

If possible, a baby should spend the hot months out of the city. The mountains or inland country are to be preferred to the seashore while the baby is under two years old. In selecting a summer home do not choose one near ponds or stagnant water of any kind. Unless it is absolutely necessary do not take a baby or young child to a hotel or large boarding house for his summer outing. The smallest cottage in the most unfashionable country place is to be preferred to a hotel full of noise and excitement, where numerous people stop to admire the baby or to whom he is far too often "shown off" by his mother or nurse. Then, too, the kitchen and laundry arrangements in hotels are apt to be in-

convenient, and often are very expensive if special privileges are requested.

If the baby must be kept in the city, keep him in the parks before 9 or 10 A. M., and between 5 and 7 P. M. The rest of the time he is better off in the house. When in the house let him spend the hottest hours of the day on the bed, or on a mattress or pad on the floor, and dressed in his little shirt, band, and diaper only.

Be sure to give the baby cool water that has been boiled, and plenty of it. He needs it now even more than he did in cool weather. Make a practice of giving him an ounce at least between his meals.

Even in summer the baby should have clothing which contains some wool. A mixture of silk and wool or cotton and wool may be used for shirt, band, and skirt. The band should never be left off; in the hottest weather the shirt may be omitted, and the long ribbed band having shoulder straps may take its place, but it is absolutely necessary to keep the abdomen covered by means of the band.

The nightdress should now be of cotton and the skirt left off at night, if it has not already been discarded, but the band and a thin shirt should be worn. Long white cotton stockings which may be pinned to the napkin should be worn all summer, and not short socks.

In summer it is important to keep the baby's head as cool as possible, therefore do not use a hot sunbonnet which shuts off all the air; muslin caps or light piqué hats afford enough shade if the baby has a carriage parasol.

If one expects to take a long sea voyage or travel a long time on the cars where fresh milk cannot be obtained, it will be well to accustom the child to taking either condensed milk or one of the best prepared foods which can be made with water, before starting on the journey. Begin to do this two or three weeks before leaving home, and give the baby one or two meals each day of this food. This is a good plan to follow even if the baby is nursed by his mother, for she may be ill or unable to nurse her infant for some

reason, and it is best to be prepared for such an emergency.

Milk that has been rapidly cooled and placed in sealed and sterilized glass jars will keep from four to six days, if kept well packed in ice. Enough food for twenty-four or even forty-eight hours may be prepared at home, if it is sterilized and packed in a little traveling basket which contains a small compartment in which to keep ice.

The formula sometimes used for the sixth month is: Six ounces of top milk skimmed from the top of a quart bottle of milk, ten ounces of milk poured off, twenty-four ounces of barley or oatmeal gruel, four teaspoonfuls of granulated or seven of milk sugar, a pinch of bicarbonate of soda, and a pinch of salt. This should be pasteurized, cooled in the usual manner, and given to the baby every three hours up to 9 or 10 P. M. From four to six ounces may be taken at each meal.

When an exceedingly hot day comes it is always wise to pour out one or even two ounces

from each bottle of the regular mixture and substitute boiled water in its place.

If the baby is at all apt to vomit, it will be best during the hot weather to use only four or five ounces of the top milk instead of six, and to make up the quantity with the gruel. Unless the baby is inclined to be constipated barley gruel is better to use in summer than oatmeal, for it is less heating.

Another good plan, when the baby has delicate digestive organs, is to make one meal a day, all through the very hot weather, of mutton broth made in the following manner: One pound of the neck of mutton cut up, one pint of cold water, and a pinch of salt. Cook very slowly for three or four hours until you have half a pint, adding a little water, if necessary, from time to time, as it boils away; then strain through muslin, and when cold remove every particle of fat. This broth may be added to an equal quantity of barley water and fed to the baby lukewarm through a nursing bottle.

All these simple measures help to ward off the

dreaded "summer complaint," and give the digestive organs less work to do during hot weather and while the teeth are being cut.

"SUMMER COMPLAINT"

"Summer complaint," or summer diarrhœa, is very common in young children, but fortunately we now know how to handle the trouble, and the mortality is growing much less than it was a few years ago. This disease is really a poisoning which takes place through the digestive organs. Therefore the first thing to do in treating the trouble is to rid the system of the irritating matter.

The young mother may safely do a great deal to help her baby before the doctor arrives. As soon as the diarrhœa begins, stop all milk at once and give the baby a teaspoonful of castor oil. Instead of the milk give the baby gruel made of either barley or wheat flour, alternating with mutton broth and barley water in equal parts. As the child is losing a great deal of water through his frequent thin passages, he must be

given all the water to drink possible to make up the loss. A half-teaspoonful of Liquid Peptonoids given in a little water or else in the barley water, every two or three hours, is excellent.

If there is much vomiting with the diarrhœa, egg water will often be retained better than plain water or indeed anything else. To make egg water stir the white of one egg into a pint of cold water, being careful to have them thoroughly mixed; add a small pinch of salt and strain through cheese cloth. If the baby is weak, a teaspoonful of brandy may be added to this. The baby may be given a teaspoonful of this every half-hour, or if he vomits all other food he may have two ounces of the egg water every two hours. It will not sustain life indefinitely, but it will often tide the child over until more nourishing food can be borne.

When there is much fever or there is much blood or mucus in the stools it is well to irrigate the bowels. This treatment will often help to bring down the fever. If possible, the doctor or the trained nurse should do this, at least for

the first time; but if the mother is too far away to obtain such help in time, she may do it herself.

When going any distance from stores in the summer with a family of young children, the mother should take with her a fountain syringe and a soft rubber catheter, which will be found invaluable in time of need. This catheter must be a very long one and have a hole at the end as well as one at the side.

The fountain syringe should be filled with a quart of warm water, which has been boiled and cooled to a temperature of 98° to 100° F. Add two teaspoonfuls of salt and hang or hold the bag about three feet above the child. The catheter should be attached to the rubber tube of the syringe and oiled. Place the child on the table on his back or a little turned to the left side, the table should be covered with a pad and rubber cloth, and have a basin close to the end of the table and a little below it so that the water which will flow from the child's intestines will run into the basin. The child's legs should be

bent at right angles to his body and the catheter gently inserted into the rectum for about two inches; then turn on the water and allow it to flow gradually into the intestines and come out again beside the tube, carefully pushing the catheter up until it is nearly all inside the intestines, but if it does not go up readily no force should be used. After a quart of water has been used leave the catheter in the intestines, but detach it from the syringe and very gently knead the abdomen of the baby so that the remaining water will run out through the tube. When no more water comes remove the catheter gently. Once a day is enough for this irrigation unless especially ordered otherwise by the doctor.

When the baby is restless or has much fever do not forget that an alcohol sponge will often help him more than anything else. Frequently the above treatment will be all that is necessary to stop an attack of diarrhœa, but sometimes bismuth and other drugs are needed and should be ordered by a doctor.

CONVULSIONS

Owing to the condition of their nervous system young children are more subject to convulsions than older people. While convulsions may denote serious brain trouble the physician first thinks of the cause as an overloaded stomach or some other form of indigestion, and when the doctor arrives the mother must try to remember whether the baby has had anything unusual to eat or drink and tell him at once, if such has been the case.

Before the doctor can arrive the mother should undress the baby and put him to bed in a quiet room, and place an ice bag to his head, or wring out cloths in ice water, placing one on the child's head, and changing them often enough to keep them very cold. The child's feet may be kept warm by means of a hot-water bag. If the doctor cannot come very soon, a mustard foot-bath may be given the child while he is still in bed. If it can be avoided, it is much better not to disturb the baby by taking him out of bed to give a full bath. When the convulsions are very severe

towels may be wrung out of mustard water, a rubber sheet placed on the bed, and the child wrapped in the wet towels.

Use two tablespoonfuls of mustard to a gallon of water and keep the baby wrapped up in the towels or his feet in the mustard water until they become quite red. Have plenty of hot water ready so that, when the doctor comes, he may give a full tub-bath if he thinks it best to do so. If the child can swallow, give him a teaspoonful of castor oil; and if the convulsions continue irrigate his bowels or give an injection as soon as possible.

PRICKLY HEAT

This is a skin trouble well known to most mothers. Babies who are dressed too warmly, or who do not have frequent cooling sponge baths, are especially apt to have it. When there is much prickly heat on the child's body a thin cotton or linen shirt should be worn next the skin, then the band and ordinary shirt; this will allay the itching. Give frequent cool sponges of water and bicarbonate of soda, or a little vinegar

may be added to the tepid water and the child bathed with that. Bran baths and starch baths are also excellent. After the bath dust a powder, composed of starch and talcum, equal parts, and one-fourth as much boric acid, all thoroughly mixed together, over the child's body. This may be used several times a day and will help to make the child more comfortable.

CHAPTER SEVEN

THE SEVENTH MONTH

Exercise pen. Care of teeth. Salt-water baths. Food formula. Receipt for whey. Measles. German measles.

WHEN the baby is seven months old he will often want a little more room for exercise than can be had in a clothes-basket. The young mother will now find an "exercise pen" of the greatest value. It may be bought ready-made, or made at home by a relative or by a carpenter. The home-made ones are often to be preferred to those that can be bought, for it is difficult to find one in the stores that stands on legs. The pens bought in the stores usually have a canvas bottom and fold up when not in use. If the pen is made at home it should be built of light wood and should stand on legs about two feet from the floor, so that the

baby will be out of all draughts. The sides should be high enough to prevent a baby from tumbling over them. In summer the pen may stand out of doors in the shade and a light frame made to go over it for netting, so that flies or mosquitoes cannot annoy the baby. When the baby is in such a pen the mother can feel that he is perfectly safe while she is busy.

CARE OF THE BABY'S TEETH

As soon as the teeth come, great care must be taken to keep them clean, so that they will not decay. Unless the mouth is properly washed milk is apt to remain in it, turn acid, and so gradually destroy the enamel of the teeth.

At least twice a day the mouth and teeth should be washed carefully with a soft piece of linen or absorbent cotton dipped in boric-acid solution, and it is even better to do this after each meal. As soon as the baby has eight or ten teeth a soft brush may be used, and if there are any specks on the teeth a little prepared chalk may be put on the brush.

SALT-WATER BATHS

If spending the summer near salt water the young mother will often wonder whether sea baths would not benefit her baby. Such baths are no doubt of some benefit, but if taken in the house they are not so invigorating as in the ocean.

Babies under two or three years old cannot, of course, bathe in the sea, so if the salt bath is to be given the water must be brought to the house and heated to a temperature of 98° F., and then the bath given. Care should be taken not to get the salt water into the ears, as it may harm the delicate drum membrane.

A seven-months-old baby should have six meals in twenty-four hours, of six or seven ounces at each meal. The formula often used at this period is as follows: Six ounces of top milk skimmed from the top of a quart bottle of milk, fifteen ounces of milk poured off, twenty-one ounces of barley or oatmeal gruel, a pinch of bicarbonate of soda, seven teaspoonfuls of milk sugar or four of granulated. The food should be bottled, pasteurized, and cooled as usual.

WHEY

Whey is often ordered for delicate or sick babies, and the young mother should know how to make it; here is a receipt: Take one pint of cow's milk and let it get just lukewarm, add a pinch of salt, two teaspoonfuls of granulated sugar, a junket tablet or else two teaspoonfuls of liquid rennet or Fairchild's essence of pepsin; stir this for a moment and then allow it to stand for about twenty minutes, or until the clot forms; then break up the clot with a fork and strain the whey off through muslin. The milk must not be allowed to grow hot, as the clot will not form. If the baby is weak enough to need a stimulant, add two teaspoonfuls of sherry wine to this. In cases of acute indigestion this whey is often very useful.

MEASLES

Of all the contagious diseases measles is perhaps the most likely to be contracted if the baby is exposed. After the exposure generally ten or fourteen days elapse before the first symptoms appear.

The first thing noticed usually by the mother is that the child seems to have a bad cold; he sneezes and coughs, his eyes will often be quite inflamed and a watery discharge will come from both eyes and nose; there is usually also some fever and fretfulness.

It is at this stage of the disease that other children are most apt to contract it, in fact nine out of every ten will take the disease if exposed at this time. If a doctor is now called in, he will often be able to see little spots in the mouth which appear before the rash on the body can be seen; these spots will confirm the diagnosis and are often of great value for this reason.

Generally by the fourth day the rash is seen, first on the face, which appears quite swollen, then the neck, from whence it rapidly spreads to all parts of the body. This rash is bright red and in blotches, leaving little crescent-shaped areas of white skin between the patches; it is a little raised above the surface of the skin and usually remains at its height about three days; then it begins to fade, leaving first the face,

where it began, and then the rest of the body, so that after three days more it can hardly be seen.

Just before and while the rash is out the fever is often quite high and the child feels very sick, but as it fades the fever grows less, and the baby is more comfortable. Next the skin begins to peel off in very fine scales like bran. The child should be kept away from all other children at least two weeks after all peeling has ceased. This is the usual picture that measles presents, but there are forms much more severe and again other forms are lighter, the rash being faint and only out for a few hours.

The treatment of an uncomplicated case of measles is simple; the child should be at once isolated as soon as the disease can possibly be diagnosed, he should be put to bed and kept warm but not hot. The room should be kept at an even temperature of 70° to 72° F., but plenty of fresh air should be allowed to enter, for nothing is worse than a close sick room. The light should be subdued on account of the inflamma-

tion of the baby's eyes. While the fever lasts the usual food should be diluted one-half and then the strength very gradually increased until the baby is again taking his usual formula.

Great care should be taken of the eyes and mouth. They should be washed three or four times a day with a saturated solution of boric acid. Every day the baby should have a warm sponge bath (given under cover of a blanket) and then be rubbed all over with vaseline. This will help to allay the itching which is often present, and also prevent the scales of skin from flying about.

If the child is exceedingly restless and has a very high fever, an ice cap should be placed on his head and a little alcohol added to the water with which he is sponged.

The room in which a baby is isolated during a contagious disease should be large, bright, and airy, having an open fireplace if possible. If the room has no paper on the walls, so much the better. It should have no carpet on the floor or any upholstered furniture of any kind, nor any

other unnecessary articles which cannot be destroyed when the disease is over.

Only the doctor and the people who take care of the baby should be allowed in the room, and they should wear cotton clothing. It is much wiser not to allow the mother or nurse to mingle with the rest of the family in any way, but when a mother must do her own housework as well as take care of the sick baby, she cannot be absolutely isolated. While in the sick room she should wear a large cap which completely covers her hair, and a cotton garment of some kind that can be easily slipped on and off. A long linen duster is often convenient. These should be kept at the door of the sick room and worn while in the room only. She should also carefully wash her face and hands before leaving the room.

The other children in the family should not be sent to school while the baby has measles; it is very likely they will come down with it unless they have had it before, and it would be very wrong to expose a lot of other children to the disease.

It is the complications of measles which are the most serious feature of the disease, and the doctor must keep a careful watch of the baby's lungs, ears, eyes, and kidneys. Pneumonia is very apt to develop, in the case of young babies especially, and it must be carefully guarded against and promptly treated if it should occur.

When the doctor thinks it is safe for the baby to leave the sick room, the child should be given a warm bath in a solution of bichloride of mercury, 1-5000, hair and all; then one in warm water and soap; he should then be wrapped in a fresh, clean blanket and carried into another room, where clean clothing should be put on. The nurse should also take these same precautions.

During the illness and after the child has left the sick room, all bedding and clothing worn during the disease should be soaked over night in a solution of carbolic acid, one ounce of the acid to two gallons of the water; the clothes should then be taken to the laundry in a covered pail and boiled for half an hour.

The sick room should always be fumigated after measles, and if a mattress and pillow have been used they should be remade after they have been fumigated, or disinfected by dry heat. If there is paper on the wall, it is much safer to have it scraped off and fresh paper put on.

GERMAN MEASLES

German measles is a much less serious disease than measles. It is sometimes mistaken for a second attack of measles, but it is really quite a separate disease.

If a child has been exposed to the disease, he is liable to show symptoms of it at any time from five to twenty days after the exposure. Sometimes the child will seem a little feverish and languid, but most often the first thing noticed about the disease is the rash. This is usually first seen on the face, but may cover the entire body almost from the very first. The appearance of this rash also varies a good deal; it is usually pale red, and varies from little spots the size of a pin-head to those of a pea. Some-

times the spots remain separate and again they will run together, looking somewhat like the blotches seen in measles. This rash frequently remains out only a day or two and then fades. The fever is seldom high, rarely being over 102°, and the child does not appear very sick.

Rest in bed, with a very light diet, while there is any fever, is all the treatment necessary. The glands behind the ears in the neck are almost invariably enlarged during and just after this disease.

CHAPTER EIGHT

THE EIGHTH MONTH

Ice for teething babies. Creeping trousers. Food formula. Mosquito bites. Chicken-pox. Scurvy.

THE average baby eight months old will usually have cut his two lower central teeth, which are called "the lower central incisors." At any time from the eighth to the twelfth month the four upper middle teeth or "upper incisors" may be expected, so that by the time the baby is one year old he will usually have six teeth.

Many mothers ask if they may allow a teething baby to suck ice. The coldness of the ice is no doubt very grateful to the hot and swollen little gums, and if comparatively pure ice can be obtained it is a good plan to let the baby have a little occasionally. In winter, water can be

boiled, cooled, and put out of doors in a covered vessel to freeze, and so be really pure for the baby's use. The mother should wrap a small piece in a napkin, leaving out the end that the baby is to suck, then she should hold it and gently rub it on the gums while the baby has it partly in his mouth.

Often an active, healthy baby of eight months will attempt to creep a little on the floor or in his "pen." This is good exercise and should be allowed if the baby does it of his own accord, but do not urge him to do so; he knows better than his mother when his little limbs are strong enough for such exercise.

Creeping is ruinous to white dresses, petticoats, and stockings, therefore many mothers make "creeping aprons" for their babies to use while on the floor. These aprons are made of fine gingham and may be put on over the dress or worn without one in very hot weather. They are usually made to button all the way down the back and sometimes have an elastic or drawstring run into the hem at the bottom of the

apron, so that the white skirts may be kept perfectly clean.

One mother of twin babies, who found it necessary to economize in the matter of washing, made for her children some creeping trousers. In summer they were made of thin gingham and in winter of outing flannel. They were cut after the pattern of ordinary worsted leggings, coming all the way down to the ankles and having broad elastic to go over the feet and prevent the leggings from slipping up. They were made quite full and long enough to tie under the armpits. The little white dresses were then smoothly tucked in and the babies allowed to tumble about to their hearts' content, without fear of soiling their clothes.

Some mothers seem to think that as soon as the baby has any teeth it is time to give him solid food. They will give the baby "just a taste" of bread, cake, and, worst of all, potato. Now potato contains so much starch that it is very difficult for a baby's stomach to digest, and it should not be given until the baby is at the

very least two years old. Gruels, broths, and milk are quite enough for a baby until he is a year old.

Convulsions are often caused by allowing the baby to have "just a little" of food from the table. It is much better to keep on the safe side and give the baby only what is especially prepared for him and suitable to his special needs.

An eight-months-old baby will usually be able to take a formula composed of: Six ounces of top milk skimmed from the top of a quart bottle of milk, seventeen ounces of milk poured off, twenty-one ounces of gruel, seven teaspoonfuls of milk sugar or four of granulated, a pinch of bicarbonate of soda, and a pinch of salt. This should be bottled and pasteurized, as usual, and given to the baby every three hours up to 10 P. M., giving six and a half to seven and a half ounces at each meal.

HOW TO TREAT MOSQUITO BITES

The greatest pains should be taken to keep flies and mosquitoes away from the baby. Strange

as it may seem, a baby will often allow flies to walk all over his face without attempting to brush them away or even moving his head.

The nursery windows should be carefully screened in summer time, and when the baby is asleep, either indoors or outdoors, he should be protected by means of netting. If this netting is suspended high enough above the baby so that he does not feel it, he will not be annoyed by it.

Flies are not only very troublesome, but they are even dangerous at times, as they often carry germs of disease on their legs and wings. Frequently they light on the baby's mouth or on the nipple of his nursing bottle, which must then be taken into his clean little mouth. I have known a very bad case of ophthalmia to be caused by a fly lighting on a baby's eye.

It is well-known now that mosquitoes carry the germ of malaria and possibly other germs also. Many children, as well as adults, contract malaria by being bitten by mosquitoes. Some babies are badly poisoned by the bite, a large swelling taking place which is often very sore

and even painful, while the itching is intense. A little camphor, wet compress of witch-hazel, solution of bicarbonate of soda or boracic acid should be kept on the bite, and if the child attempts to scratch the place his hands should be tied or so fixed that he cannot reach the spot, for if he is allowed to scratch he may poison the place still further by means of his nails.

Sometimes one part of oil of sassafras to three of alcohol will keep away mosquitoes, if a little of it is rubbed on the baby's hands or cheeks. At least it is worth trying.

CHICKEN-POX

Chicken-pox is another of the contagious diseases apt to be contracted by infants under one year of age, as well as by older children. The disease may be contracted by direct exposure or may be carried by a third person.

A baby who has been exposed may develop the disease at any time from ten days to two weeks after exposure. Frequently the first thing noticed by the mother is that the child is a little

feverish. But this symptom is sometimes not present, or present in such a slight degree that it is not noticed by the family. In such a case the rash is usually the first sign of the presence of the disease.

Generally the rash is first seen on the face, scalp, or back; it is sometimes perceptible in the mouth. When it first appears it consists of little papules which soon become vesicles or blisters; then in a few days these vesicles begin to dry up and crusts form, which drop off at any time from five to twenty days. If the skin has been very deeply invaded a little scar may remain, but generally no mark is left.

One of the most characteristic points of the disease is that the eruption appears in crops. When some of the spots are drying up others are just beginning to appear, so that all stages of the rash may be seen on the body at the same time. When the eruption is most rapidly appearing the fever will often be quite high; as long as there is any fever the child should be kept in bed and his usual food diluted with gruel or water. The

child should of course be isolated and not allowed to mingle with other children until the skin is quite clear, nor should he be allowed to go out of doors while the rash is seen.

Very little treatment is needed, but the baby should not be allowed to scratch the spots, for there is danger of poisoning if this is done. It is a good plan to rub the entire body with carbolized vaseline, as this often helps to stop the itching which is at times quite annoying, and it makes the baby more comfortable and less restless if this can be stopped.

It is best to disinfect the clothing worn by the patient before it is sent to the laundry and to fumigate the room at the close of the disease.

SCURVY

This is a disease not infrequently seen in babies as well as among sailors, with whom the name "scurvy" is most frequently associated. When the disease attacks sailors it is usually ascribed to lack of fresh food and this also is the case with babies, for it nearly always occurs

among infants who have been kept for a long time on a proprietary food or else on milk that has been much oversterilized. The disease is seldom or never seen among breast-fed children, or among those who have been fed on properly modified cow's milk.

It most frequently attacks babies who are delicate and poorly nourished. The first thing often noticed by the mother is that the child seems to be in acute pain whenever his legs are touched; when his napkin is being changed he will often scream; sometimes it is both legs that are painful, and again only one will be affected; at other times the arms will be most painful, and again the extremities seem to suffer about alike. As the disease progresses the joints usually become more or less enlarged, sometimes little red spots appear just under the skin,—these are hemorrhages,—and very often the gums will become red and spongy; this is especially noticed around the incisor teeth of the upper gums, if the baby has already cut them.

When a doctor is called in, if he is not accus-

tomed to the diseases of children, he will frequently think the baby is suffering from rheumatism, but scurvy nearly always occurs in a bottle-fed baby under two years old, while rheumatism is very rarely seen at that age. Then, when a child has rheumatism in an acute stage there is nearly always fever, while in scurvy it is seldom present.

A wrong diagnosis seems almost inexcusable, and yet we are constantly hearing of these two diseases being confused and the cure being delayed because the child is receiving treatment for rheumatism, when in reality scurvy is the disease from which he is suffering.

When the correct diagnosis is made early, it is usually a matter of a few days only to effect a complete cure.

If the child has been taking a patent food it must at once be stopped, or if the milk has been sterilized it must be discontinued, and the baby given unsterilized milk diluted to the proper strength for his especial age. He should also be given the strained juice of an orange every

day; if he is under six months old, he can have the juice of half an orange, over that age he can usually take the juice of an entire orange at intervals during the day.

Beef juice is also excellent, and most babies will be able to stand two ounces during the twenty-four hours. If it seems to cause indigestion, however, a smaller quantity must be given.

This is generally all the treatment necessary, and a marked improvement will usually be noticed in from twenty-four to forty-eight hours after the treatment has been commenced.

CHAPTER NINE

THE NINTH MONTH

Development. Shoes. Food formula. Peptonized milk. Diphtheria. Hives. Nosebleed. Foreign bodies swallowed. Foreign bodies in eyes, ears, and nose.

THE average healthy boy baby of nine months usually weighs eighteen pounds, and a girl baby seventeen and three-quarters. A baby of this age generally makes some attempt to stand on his feet, and sometimes will pull himself up by taking hold of his "pen" or the side of a chair, and will even stand several minutes while holding on to them. Unless he does this of his own accord he should not be urged.

Frequently a baby of this age will say "Ma-Ma" and "Pa-Pa" quite distinctly, and sometimes other short syllables; he may also attempt to sing a little.

His long morning nap should still be continued, and if he seems sleepy in the early afternoon he may be allowed to take another short nap then.

If the baby is a heavy one and attempts to stand on his feet much, the little moccasins or kid shoes that he has been wearing will hardly be stiff enough to support his ankles. There is a shoe made that has whalebones at the sides and that laces down the front, that many mothers like to use at this period for their babies. Another shoe that answers the same purpose is made with simply a piece of stiffening at the side.

All shoes worn by babies and young children should, of course, be without a heel; they should have a broad, flat sole, and be made to fit the individual child's foot as accurately as possible. Laced shoes are a little better than buttoned ones, for they can often be made to fit better.

The ninth-month food formula often consists of the following: Six ounces of top milk skimmed from the top of a quart bottle of milk, twenty

ounces of milk poured off, twenty-two of gruel, eight teaspoonfuls of milk sugar or five of granulated, a pinch of bicarbonate of soda, and a pinch of salt. Seven to eight ounces of this formula should be given to the baby every three hours up to 10 P. M.

Sometimes when the baby has had a serious illness and cannot digest the curd of cow's milk, the doctor will order peptonized milk; but this should never be continued indefinitely, because, as already mentioned, the child's stomach becomes so accustomed to having its work done for it that it will, after a while, refuse to work for itself.

Peptonizing the milk digests the curd either wholly or partially, according to the length of time the action of the peptonizing agent is allowed to continue. To peptonize milk completely two articles are necessary—pancreatic extract and bicarbonate of soda. These substances may be procured in tubes, in the form of tablets, or in bulk. The tubes or tablets are often considered most convenient, for it is then

not necessary to weigh the powder. When peptonizing milk to be modified it is a little better to peptonize the milk first, and then add the other ingredients afterwards.

To peptonize one pint of milk it is necessary to take fifteen grains of bicarbonate of soda and five grains of pancreatic extract, rub them up in a little cold milk; add this to one pint of cold milk, and mix very thoroughly. Stand the jar or pitcher containing this mixture in a deep basin of water the temperature of which is 115° F. Cover it, and keep it at this temperature for two hours; then add the barley water and other ingredients, except the soda (which is already in the milk) mentioned in the different formulas. This completely peptonized milk will have a very bitter taste, but it will not be noticed by very young infants, and older children will grow accustomed to it after a while.

When the doctor orders partially peptonized milk it should be treated as above, but allowed to stand in the water only ten or twenty minutes, or as long as is prescribed. If peptonized for

ten minutes it has no bitter taste. Partially peptonized milk should always be scalded after it has stood in the hot water the required length of time, otherwise the peptonizing process may continue, and the milk will be bitter.

When the child is to be put back on unpeptonized milk again it is well to make the change gradually, shortening the length of time the milk is left in the water, and the amount of powder used every day until unpeptonized milk can be taken.

"Peptogenic milk powder" is often used by young mothers as a food for their babies for long periods of time, but, as explained above, this should not be done because the stomach will not act without it, if it is continued too long.

Completely peptonized milk should be used for a few days or at the very most a few weeks, while partially peptonized milk may be given for two or three months if it is really necessary to do so, but it should be discontinued as soon as possible.

DIPHTHERIA

This is a disease that babies contract as well as older children, and as the baby cannot complain of having a "sore throat," the trouble is sometimes well advanced before the mother discovers that something is wrong. In a family of young children it is an excellent plan to make a practice of examining the throats of all the little ones two or three times each week. Have the child either held, or if old enough, stand facing a good light, then take the handle of a teaspoon and gently depress the tongue so that the tonsils and the entire back of the throat may be easily seen. The mother will soon become so expert in this examination, and the child so accustomed to it, that it can be done in a second, and with no annoyance to either one.

The most frequent seat of diphtheria is the mucous membrane of the nose and throat. If the baby has a thin, serous discharge, often mixed with a little blood from the nose, the mother should at once call her doctor's attention to it, and have an examination for diphtheria germ made.

If the baby has been exposed to the disease, he may develop it at any time from twenty-four hours to three or four weeks after the exposure. If the membrane is in the child's throat, often the first thing noticed by the mother will be that the baby seems to have less desire for his bottle, and perhaps the glands at the side of his neck may be swollen. There may or may not be fever, but in a case of pure diphtheria it is seldom very high.

On examining the baby's throat the diphtheritic membrane will be found to vary a good deal in appearance—sometimes looking like a faint greyish white cloud, and at other times being a dirty yellow and thicker. It is most often seen on the tonsils. As soon as the mother sees this she should notify her doctor without a moment's delay, for if the child is to be saved prompt action is necessary. The baby should, of course, be isolated at once. The doctor will generally take a culture of the membrane, and as soon as the diphtheria germ is discovered, or if the child's condition seems at all serious, even before an ex-

amination of the culture can be made, he will give the baby a hypodermic injection of antitoxin.

Unfortunately, there are still some people who do not believe in the use of this invaluable remedy, but the majority of successful practitioners look upon antitoxin as "a friend in need," and make free use of it. To be of the greatest benefit it must be given early in the disease and in a sufficient quantity. If this is done, frequently the membrane will begin to disappear in a very few hours, and I have known several cases when the child's throat was entirely clear in twenty-four hours after the administration of antitoxin. Paralysis, heart trouble, and kidney trouble are the most frequent complications of diphtheria, and must be carefully watched for by the doctor.

The other treatment needed during the disease varies greatly, and must, of course, be left to the family doctor. The duration of the disease varies also, but the baby should not be allowed to come in contact with other children

until a culture of his throat has been taken and the germ found to be absent. One attack of diphtheria does not protect the child from having another; in fact, it often makes the child more susceptible to throat troubles of all kinds.

At the close of the disease the sick room should be fumigated, and all general measures for the prevention of the spread of the disease which have been mentioned in the preceding chapters should be most carefully carried out.

HIVES

Hives or urticaria is often seen in young children. The disease is most frequently caused by indigestion, but sometimes it follows the use of antitoxin.

It is not at all a serious disease, but as it causes itching of the skin the child is uncomfortable and often quite cross. The eruption is bright red in color, and appears in blotches, or wheals. It may cover a large portion of the body, or be seen only in a few scattered spots. Sometimes it will dis-

appear in an hour or even less, and again it may last several days.

The first thing to do is to give the child a laxative. Milk of magnesia and citrate of magnesia are both mild laxatives, and one of these will usually be sufficient to open the bowels. Rhubarb and soda mixture should then be given in the proper doses, according to the age of the baby and as prescribed by the doctor.

To relieve the itching, sop the spots with warm water in which is a little bicarbonate of soda; if the eruption is very extensive, an entire bath of this may be given.

NOSEBLEED

Nosebleed may be caused by knocks or bumps, or may be due to the baby's general condition. It is often seen in nervous and excitable children.

When there is much bleeding from the nose the baby should be kept in a semi-upright position. Cold applications, such as ice cloths or a small piece of ice wrapped in cotton, should be

held on the bridge of the nose and at the back of the neck. If this does not help, try to press hard on the upper lip close under the nose, or if the child is old enough a wad of tissue paper may be firmly packed under the upper lip.

When all these simple means of treatment fail a doctor should be summoned, for it may be necessary to use a drug or to plug the nose very far back with cotton or another substance.

When a child has frequent attacks of nose-bleed with no apparent cause, he should be examined by the doctor, who will prescribe the proper constitutional treatment.

FOREIGN BODIES SWALLOWED

When the baby begins to creep on the floor, if small articles, such as pins, buttons, or beads, are left lying about, he is apt to put them in his mouth, and his mother may be suddenly called upon to remove them. The frequency with which mothers and careless nurses leave safety pins about is greatly to be deplored. One baby managed to swallow five safety pins (one of

which was open) while the nurse's back was turned for a minute only.

Often, if the object swallowed has not passed down far, it may be brought up by simply giving the child a sharp slap between the shoulders, or by turning him upside down and holding him by his feet, and then slapping his back. If this does not bring up the object the mother should try to reach it with her finger, but when the article swallowed has reached the stomach give the baby plenty of mush, bread and milk, or even baked potatoes, which will form a soft coating about it and help to bring it safely through the stomach and intestines. Never make the grave mistake of giving a cathartic to hurry the body through; this does far more harm than good, and may be even dangerous.

FOREIGN BODIES IN THE EYES, EARS, AND NOSE

When the baby gets something in his eye the mother should attempt to hold the lids apart, and if she can see the article remove it with a small, damp piece of fine linen; if the child is

old enough, have him blow his nose, as this may help to bring the object out, or an eye-stone may be put into the eye. This will usually work around the eye, find the object, and then work its way out. Sometimes, when an eye-stone cannot be had, a flaxseed may be used in its place.

When the foreign body is in the nose hold one nostril, and make the child blow the other one if he is old enough to understand how to do this. If not, tickle his nose with a feather, or induce a sneeze by means of a little pepper.

If the substance is in the baby's ear, it should not be tampered with unless it may be easily seen at the opening of the ear. Take the child at once to a good doctor, for if the article is not soon removed grave trouble may result.

CHAPTER TEN

THE TENTH MONTH

Use of "baby tender." Nursery gate. Clothing for fall. Beef juice. Food formula. Scarlet fever.

NOW that the baby is ten months old he may be allowed to use a "baby tender" or "baby jumper" for a short time each day. The best kind to buy consists of a light, but strong, wooden frame on casters, the top or body ring of which has a seat suspended below it by adjustable steel springs, so that the child's feet touch the floor.

When the baby is first put into the "tender" he will generally use it as a seat or "jumper," but little by little he will push it along the floor with his feet, and gradually learn the motion of walking. Great care should be taken to adjust

the seat properly as the baby grows, otherwise he will be very uncomfortable.

At first he should be allowed to remain in the "tender" only fifteen minutes at a time; then a little longer each day; but as soon as he shows any signs of being tired he should be taken out. A simple "tender" may be bought for two dollars and sixty-five cents; a more elaborate one for four dollars.

Another article which will be found very useful to mothers having babies of this age is a nursery gate, which is so made that it can be adjusted to any door or to the head of a staircase. If one does not wish to buy a gate a very good substitute may be made at home by taking a board about the height of the child and wide enough to fit the doorway; grooved pieces of wood should then be nailed to each side of the doorway framework, and the board will slide up and down in these grooves.

In the early fall when it is not quite time to put on winter flannels, and is a little too cool for the thin summer ones, the young mother will

often be quite puzzled as to the best method of keeping her baby warm enough without overheating him, especially if she cannot afford a third set of flannels for fall and spring wear. It is a good plan to make two or three little jackets of light flannel or cashmere, and in the cool mornings or evenings let the baby wear one of these, either over or under his white dress. In the middle of the day when the air is warmer the jacket may be left off and so keep the baby's body at the right temperature.

In the fall it is well, also, to have a little wood fire in the nursery when the baby is being dressed and undressed; and if he has been accustomed to having his nap on the piazza in his carriage, place a screen around it to protect him from any possible draught. On chilly days he had better have his nap in the house after the first of October.

In the fall the baby should be in the house at 6 P. M., unless the weather is exceptionally warm. All these hints seem mere trifles, but in taking care of babies it is the little things that

count the most if the mother wishes to make her baby a strong, healthy child.

A baby of ten months should be given a little beef juice, first beginning with one teaspoonful once a day, and then twice a day; then give two teaspoonfuls, and so on until the child is taking an ounce twice daily. It should be given between his regular bottle meals.

Occasionally a child will be found who cannot take beef juice, either because he cannot digest it properly, or else because he has a natural dislike for it. In such cases, after a fair trial the mother should not insist upon giving it to him. She may then try orange juice once daily instead. This should always be strained through cheesecloth or fine muslin, and be given at first in teaspoonful doses, and then increased until the baby takes the juice of half an orange.

To make beef juice take one pound of thick, round steak, very slightly broil it, then press all the juice out of it by means of a meat press or lemon-squeezer; add a pinch of salt, and give it to the baby either cold or after warming it by

placing the cup which contains it in hot water until the beef juice is just lukewarm. If it is heated too much, it will curdle. A pinch of salt may be added.

If the baby is a breast-fed child, and the mother has been giving him one bottle of milk a day, as advised for a child four months old, it will now be time to substitute two meals from the bottle for two of the breast feedings every day; for, by the time baby is a year old, he should be weaned from the breast entirely, and it is much easier and safer to do this gradually. The child should now be fed every three and a half hours up to 10 P. M., making five meals in twenty-four hours of seven to eight ounces at each meal, according to his digestive capacity. The tenth-month formula is often given as follows:

Stir up the milk in the quart bottle, and take thirty ounces of this and twenty of gruel, three teaspoonfuls of granulated or seven of milk sugar, a pinch of salt, and a pinch of bicarbonate of soda. Pasteurize, etc., as usual.

SCARLET FEVER

While babies under one year of age are not so likely to contract scarlet fever as older children, they do sometimes take the disease and should never be exposed to it, if it can be avoided.

Scarlet fever is one of the most serious contagious diseases. It is not only the disease itself that is dangerous, but the complications that are likely to occur are much to be dreaded.

Epidemics of scarlet fever are more likely to be seen in the fall and winter months than in the spring and summer. The germs are very easily carried, and a child may take the disease by means of a third person, by clothing, toys, books, etc.; by being in a room which has not been properly fumigated, even months after the person who has had the disease is well; or by direct contact with a case; hence the greatest precautions should be observed in handling a case of scarlet fever.

A child who has been exposed to scarlet fever may show the first symptoms any time from

two to twelve days after the exposure, the average time being a week.

Scarlet fever generally begins suddenly with vomiting and sore throat, and sometimes with a general convulsion. The fever is usually quite high, and the child is very ill. The throat looks red and congested, and there may be some white spots on the tonsils. The tongue is usually coated white, with many little red dots, which gives it the name of "strawberry tongue," because it looks so much like a strawberry.

The rash generally makes its appearance within the first twenty-four or thirty-six hours, and is very different from that of measles. It is bright red and very fine, so close together that the whole skin has a scarlet appearance, and is often likened to that of a boiled lobster. The rash is usually seen on the neck and chest first, but it spreads rapidly. The length of time which the rash remains out varies greatly; sometimes it remains for a week, and again it fades in a few hours. In the average case it begins to fade after the fourth or fifth day, and then the skin

begins to peel. The scales which peel off are sometimes very large, and it is at this stage of the disease that others are most likely to contract it. The patient should not be allowed to come in contact with other children until all signs of peeling have ceased. This usually takes two or three weeks, and may take six.

The treatment of scarlet fever depends a good deal upon the severity of the case and general symptoms, and must be left to the family physician.

The strictest isolation must be observed, and the mother or nurse who is taking care of the baby should not go near the rest of the family, nor should she go into rooms they are likely to enter.

A warm sponge bath given under cover of a blanket night and morning, or oftener, if the child is restless from a high fever, will often soothe him and make him much more comfortable. A little alcohol may be added to the water, if the fever is very high. An ice cap placed on the child's head will often help to reduce the

temperature and quiet the restless patient. Great care should be taken of the baby's mouth; it should be washed out several times daily with an antiseptic solution, such as boric acid, or "Borolyptol," and the throat sprayed or swabbed if very sore. Rubbing the body with carbolized vaseline is also quite necessary in this disease, for it helps to keep the scales from scattering.

The baby's food should be diluted one-half while the fever lasts, and peptonized if there are any signs of indigestion. An older child should have only fluid food, such as milk and broths. Plenty of pure water should be given, and the sick room should have an abundant supply of pure, fresh air. If necessary the child may be covered up head and all for a few minutes and the windows opened wide, so that the air may be changed; then, as the room becomes warmer, the extra clothing may be removed little by little. The temperature of the sick room should be about 70° F.

The child should have a movement from the bowels every day and the action of the kidneys

should be most carefully watched; the urine should be saved and shown to the doctor frequently, as he may wish to take a specimen for examination. If the baby is a young one, a bottle or a cup may be fastened inside the diaper and the urine caught in this way. Kidney disease is one of the most dreaded complications of scarlet fever; even after the child has been apparently well for some time, at the first sign of scanty or discolored urine the mother should take a specimen of it for the doctor to see and examine, if he thinks best. The mother must be constantly on the alert for this trouble.

Another frequent complication is earache and abscesses in the ears. If the child screams as if in severe pain or puts his hand to the side of his head, heat should at once be applied to the ears and the doctor should be asked to examine the drums and make an opening in them, if necessary. If this were more promptly done than it usually is, a great deal of deafness from scarlet fever would be obviated.

The child should not be allowed to be out of

bed until the peeling has ceased, and all draughts should be carefully avoided, for a cold will often bring on the dreaded kidney disease.

At the close of the disease the child and nurse should take a bath such as was described in the chapter on measles, and all general rules for disinfection of the clothing, room, etc., should be rigidly enforced. Everything that is not too valuable should be burnt, and the paper on the wall scraped off and fresh put on. One cannot be too careful in regard to the destruction of the scarlet-fever germs.[1]

[1] Miss Wheeler in her book "The Baby, His Care and Training" gives valuable advice about nursing a case of scarlet fever, disinfection, etc.

CHAPTER ELEVEN

THE ELEVENTH MONTH

Standing alone. Care of hair. Farina. Food formula. Malnutrition and marasmus. Wet-nurses.

A BABY eleven months old will sometimes stand alone or even walk a few steps, but is usually very unsteady on his feet and will take hold of some object for support. Sometimes the child will enjoy pushing his "baby tender" along the floor without having the support of the seat; he will usually soon grow tired of this exercise, however, and be glad to be put back onto the seat of the "tender."

At this age the baby will often have considerable hair, and the mother should know how to take care of it properly. If the child is a blond, the growth of hair will apparently be less

than if he is a brunette, while in reality the light baby may have just as much hair as the dark one, but because of its light color it will show less.

In order to insure a good growth of hair in later life, careful brushing of it is necessary. Gently brush the hair with a moderately stiff brush for about five or ten minutes every morning after the baby has had his bath and the scalp has been washed and dried. This brushing stimulates the little glands at the roots of the hair which secrete the oil, and which keep the hair smooth and glossy.

If the baby has naturally a very dry skin, his hair should be washed only once or twice a week at the most, and a little olive oil or "benzoinal" may be rubbed into the scalp every night. Careful and regular brushing will, however, do much to improve the condition of the hair.

It is not well for a child to wear a long, thick bang; the hair is apt to get in the eyes and may tend to make the baby cross-eyed; if a baby must have a bang let it be a short one. A better way

of arranging the baby's hair is to part the little girl's in the middle until it is long enough to brush straight back and tie with a ribbon. The little boy may have his hair parted on the side.

When the hair grows very unevenly, splits at the ends, or is very thin, it is well to keep it clipped until it begins to have a more healthy appearance. Do not use hair tonics or washes unless they are ordered by a reliable hairdresser or doctor. Sometimes brushing the hair the wrong way will tend to make the baby's hair curly; but it is usually difficult to make really straight hair curl, and children should not be tortured by having to lie on hard knobs of curl papers every night in order that they may have curls the next day.

When the baby is eleven months old it is often well to add another cereal to his diet besides that which is used to dilute his milk. Farina is an excellent one to select, but it must be cooked in milk and very thoroughly, or the baby will not be able to digest it properly. Cook it twice as long as the directions on the package advise. When

finished it should be semi-solid. Begin by giving the baby one tablespoonful and then increase it to two. This should be given in addition to the beef juice or orange juice which the baby is now taking, for he needs the variety which these different foods will give. It is usually the best plan to make the farina come in between the regular bottle meals, which should now be given at four-hour intervals.

Most babies of this age will be able to take the following formula: The entire quart of milk, well stirred up, should be used, thirteen ounces of barley or oatmeal gruel should be added to it, a tablespoonful of granulated sugar or two of milk sugar, a pinch of salt, and a pinch of bicarbonate of soda. This should be treated as usual, and given to the baby, eight or nine ounces at a time, for five meals in twenty-four hours.

MALNUTRITION AND MARASMUS

In treating these diseases so much depends upon the care and faithful nursing of the mother that it seems only right she should receive a

little instruction which she may use in time of need.

It is difficult to draw a strict line between malnutrition and marasmus, the latter is really a later and more severe form of the former; they signify "wasting," and sometimes by the ignorant are called "baby consumption." Malnutrition may follow some acute disease, but is most often due to improper feeding, unhygienic surroundings, or sometimes to an inherited weakness.

A victim of marasmus is a very pitiful little object; he reminds one of a shriveled-up old man or woman: the skin is dry, the eyes are sunken, there is marked anæmia, the abdomen is often much distended, while the rest of the child seems to be all bones and no flesh; he will often keep up a pretty constant whine or fretful cry, and wear a tired and anxious expression the greater part of the time. Babies having malnutrition often present a similar picture, but of less severe type.

These diseases most frequently occur in in-

fancy, but malnutrition is also seen in older children. It is exceedingly difficult to cure a marasmus baby under six months old; after that age there is usually more hope for the child.

These cases are most frequently met with in institutions or in closely crowded tenements, but are not seldom seen among children of the better classes, where the mother has meant well, but has been ignorant in the care of her child; especially is this true where the mother has been unable to nurse her baby, or has been obliged to wean him after a few weeks, and then has tried one infant food after another, or even cow's milk wrongly prepared. The often plump, healthy baby will first stop gaining in weight, then begin to lose more and more each week, going rapidly down-hill until, by the time he reaches his eleventh or twelfth month, he will weigh only eight or nine pounds, or no more than he weighed at birth.

Sometimes there will be a very sudden and considerable gain, and the mother will be much encouraged until she finds that the gain is due

to œdema or water in the tissues. The child will appear swollen under the eyes and also in the hands and feet; when the finger is pressed into the hand or foot a deep mark or imprint of the finger will remain for some time.

Œdema is usually a bad symptom; when it disappears the baby will look worse than ever and seem weaker. If the mother wishes to really help her baby she must not listen to the well-meant, but most often misguided, advice of her neighbors, each one of whom will recommend a different style of treatment. The mother of one of my little marasmus patients was advised by a neighbor to "just sit and hold the baby in your arms until she dies." Fortunately, the mother did not take this advice, and a few months afterwards was able to show her neighbor a plump, happy baby.

While so much depends upon the care and nursing that the mother can give her child, she must be guided by a doctor who understands the handling of such cases. It is often very tedious and up-hill work, but if the slightest improve-

ment is shown there is always hope of more to follow, and should encourage the mother and doctor to renewed efforts.

All directions given must be followed with the greatest faithfulness and regularity; no one should be allowed to interfere with the baby's routine life as mapped out by the doctor and carried out by the mother.

A baby in an advanced stage of marasmus, who is under six or eight months old, will often do better on the milk of a good wet-nurse than on any form of artificial feeding; but as it is very difficult to find a wet-nurse whose milk is suitable to the baby's needs, and who is at the same time an agreeable person to have about, many prefer to try modified cow's milk first, and then resort to the wet-nurse if this fails.

No set rule can be laid down for the strength of the formula given to a marasmus baby, nor to the quantity to be given at each feeding. The doctor will generally begin on a weak formula and gradually work up to a stronger one. Often the food will have to be peptonized for a while.

The doctor is the one to decide what is best in each individual case, and the mother will have to be guided by him.

When the doctor deems the wet-nurse absolutely necessary to the life of the child, great care must be taken in her selection; she should be examined by the physician before she is engaged by the family. She should be a strong, healthy woman, between the ages of twenty-one and thirty-five years old, free from all diseases, and having a clear, clean skin; she should not be of a nervous, high-strung disposition, but calm and placid. Her own baby should be healthy, and it is better to have him within a month or two of the little patient's age. He should be well provided for and looked after while his mother must nurse the other baby.

The diet of the wet-nurse should be regulated by the doctor, and she should follow the general rules for a nursing mother given in Chapters One and Five.

After a few days' trial, if the baby does not improve on the milk from one woman, another

should be tried. It is always well to give the baby one meal a day from the bottle, so that if a nurse leaves suddenly, or a change is necessary, there will be something to fall back upon.

Frequently, after a wet-nursed baby has had a little start, bottle feeding can be substituted with benefit, and the nurse dispensed with.

Of about equal importance with the food is a plentiful supply of pure, fresh air. The baby must spend as much time as possible in the open air, and when he is in the house be kept always in a well-ventilated room. On days when the weather is too cold for him to be taken out of doors, he should take his airing in the house, in the manner described in Chapter Two.

The extremities of these children are apt to be cold, and should be kept warm by means of woolen stockings, mittens, and hot-water bags.

After the tepid morning bath a dash of cold water down the spine, or on the chest, is often of benefit, for it will cause the baby to scream sharply and start up the sluggish circulation, but if the baby grows blue instead of red this

should not be continued, for unless there is a good reaction more harm than good is done by this treatment.

Rubbing the body with the warm, bare hand is sometimes of considerable use, or an inunction of cocoa butter or benzoinal may be given. The child should always be kept covered by a blanket while he is being rubbed. He does not absorb enough of the substance used on the hand to really nourish him in any way, but as his skin is usually dry, and it is somewhat easier to rub with something on the hand, it is well to use one of these substances. Cod-liver oil is of no more value, and is so disagreeable to use on account of its odor, and because it stains the clothing, that its use is not advised.

Sometimes the baby will be able to take cod-liver oil or iron internally, if given in small doses, but the doctor must judge about this. It is never worth while to upset the baby's delicate digestive organs in the least degree for the sake of any good a medicine may do. These cases will often be able to take small doses of Liquid

Peptonoids or Panopeptone when they cannot retain anything else.

These little marasmus cases are about the most trying that a doctor or mother is called upon to care for, but proportionately great is their reward when, after months of faithful, patient work, they see the former little skeleton transformed into a plump and rosy baby.

CHAPTER TWELVE

THE TWELFTH MONTH

Weight, measurements, and general development. Clothing. Lifting the baby. Diet. Receipt for prune jelly. Rickets. Early signs of illness.

THE average healthy baby one year old weighs twenty and a half to twenty-one pounds. Boys generally weigh a little more than girls. The baby now usually measures twenty-nine inches in length, and his head and chest eighteen inches in circumference. He generally has six teeth—four upper incisors and two lower central incisors.

The year-old baby usually says a few words of one syllable, and understands a great deal of what is said to him. Sometimes he will walk entirely alone, but usually he will still need as-

sistance of some kind, as he is often very unsteady on his feet.

The fontanelle, or "soft spot" on top of the baby's head, is considerably smaller than it was at birth, and sometimes at the end of the first year it is closed altogether, but usually this does not take place until the eighteenth month.

Baby should still take his long morning nap and go to bed for the night at 6, or at the latest, 7 P. M.

A year-old baby should wear in winter a medium-weight wool shirt, knit band with shoulder straps, flannel skirt on a flannel waist, white skirt buttoned onto the waist of the flannel skirt, woolen stockings pinned to the diaper, laced shoes, a white dress of some cotton material, and on very cold days a little flannel or cashmere sack. At night he should wear a band, shirt, diaper, and flannel nightdress made long enough to keep his feet warm. When he goes out of doors in winter he should have on a light but warmly lined coat; a wadded lamb's-wool lining is the best, but it is quite expensive, and flannel

may be used instead, if necessary. His bonnet should also be lined with flannel, and he should wear woolen leggings, and wool mittens on his hands. A veil is not necessary.

As the baby grows older his mother and nurse are sometimes apt to lift the child by his arms, or, by taking hold of his wrists, pull him up a step. This should never be done. It is often very painful to the baby, and may cause serious injury to the joints. The proper way to lift a baby of this age is to place the hands under his arms and gently raise him in this manner.

When the baby begins to take his first steps mothers often find a leading strap useful. This strap is made of soft leather or silk web, and passes under his arms in such a way that he can be partly supported and guided without undue pressure.

Some babies a year old can take undiluted cow's milk, but for the average baby it is better to modify the milk in at least some degree still. The entire quart of milk, well stirred up, should be used; eleven ounces of gruel should be added

to this, a tablespoonful of granulated sugar or two of milk sugar, a pinch of salt, and a pinch of bicarbonate of soda. In winter it is not necessary to pasteurize the food for a child of this age, but in summer it is a little safer to do so until the baby is eighteen months old. The child should now have five regular meals a day, arranged somewhat in the following manner:

6 A. M. Nine ounces of modified milk.

8 A. M. The strained juice of an orange, or a tablespoonful of prune jelly.

10 A. M. Seven ounces of modified milk and two tablespoonfuls of a well-cooked cereal.

2 P. M. Two ounces of beef juice, or six ounces of mutton or chicken broth, or else a coddled egg (these should be alternated on different days of the week), five or six ounces of modified milk and a small piece of zwieback.

6 P. M. Nine ounces of modified milk.

10 P. M. Nine ounces of modified milk.

The baby should now be taught to give up his bottle gradually and drink from a cup instead. It is often convenient to continue the

bottle at the first and last meals for some months longer, but unless the baby is taught to drink at least part of his milk from a cup he will be apt to form the "bottle habit."

If a baby has always been fed from the breast he should be weaned completely by the end of his first year, unless there is some especial reason for continuing his mother's milk. Children who are nursed too long are apt to have rickets or anæmia.

Prune jelly is made as follows: Soak the prunes overnight in cold water; the next morning add enough fresh cold water to cover the prunes; then stew them slowly for an hour or two until they are very soft, adding water from time to time to keep them covered; then rub them through a sieve; add a teaspoonful of molasses to each pint of the prune pulp, and stew again for about half an hour. This jelly is especially good for a constipated child.

Eggs given to a young child should be either soft-boiled (three minutes), or else coddled. I prefer coddled eggs for babies, as the white seems

softer, more evenly cooked, and more digestible. Only very fresh eggs should be given to the baby, and at first, until he becomes somewhat accustomed to them, only half an egg should be given at a time; a pinch of salt, and a few crumbs of stale bread or zwieback may be added.

Coddled eggs are prepared as follows: Place the egg in enough boiling water to cover it and immediately remove the water from the fire so that, as it gradually cools, the egg slowly and thoroughly cooks; the egg should be left in the water for six or seven minutes, so that when it is broken open the white will look like jelly.

Twice a week is often enough to give a young child an egg.

Chicken broth is made the same way as mutton broth, which has already been described. The greatest care should be taken to remove every particle of fat before the broth is given to the baby.

If the baby is a strong, hearty child he may have two tablespoonfuls of farina or other cereal with his 10 A. M. or 6 P. M. meal.

RICKETS

As many babies are inclined to be rachitic it will be helpful for the young mother to be somewhat familiar with the symptoms, in order that she may recognize the trouble early and have it promptly treated.

Rickets is what we call a "constitutional disease," showing itself in many different ways. The cause of the disease is most often improper food or inability to absorb proper food; it is also sometimes due to unhygienic surroundings. Babies who are brought up on condensed milk, or on some of the patent foods which contain little fat, are especially apt to have rickets, as are also children who are kept exclusively on breast milk too long. The most marked symptoms of rickets are usually seen between the sixth and fifteenth month.

A rachitic baby is apt to be nervous and irritable and very restless at night; the child's head is apt to perspire profusely, so much so that the pillow may become very wet. The chest, instead of being well-shaped, like that of other

babies, will frequently have depressions at the sides and little nodules or "beads" in the ribs. The shape of the child's head is also peculiar, often being very flat on top and measuring more in circumference than a normal child's head of the same age. Frequently, part of the forehead will be very prominent, and in some cases there will be a furrow on top of the head between two prominences on either side of it; this is sometimes called the "valley between two mountains."

Again, there will be "soft spots" in the skull besides the fontanelle, which is apt to be large and late in closing. The child is also very apt to be late in cutting his teeth. His abdomen is generally large and prominent, his muscles soft and flabby, and his wrists and ankles enlarged. The baby catches cold easily, and is apt to have bronchitis. He is often pale and anæmic, and when he begins to walk his legs will bend easily, and he will have "bow legs."

When the child sits, his back will often appear curved, alarming the mother, who may think

her child has some spinal disease, when the deformity is really due to rickets, and may be overcome in time. The child is also very frequently constipated.

As soon as the mother recognizes any of the above symptoms she should have her child examined by a good doctor, and the proper treatment begun at once, for if the disease is looked after promptly it is much easier to control than if it is allowed to run on. The mother should see that the baby has a variety of nourishing, easily digested food, such as I have already suggested in this chapter.

As rachitic children require fat, a baby ten or twelve months old may derive some benefit from being allowed to suck a piece of broiled bacon for a few minutes at a time every day. Of course, he should not be allowed to swallow pieces of it. Fruit juices and beef juice should be given early, but very little starchy or sweet foods allowed.

The baby should have his tub bath each day, and if he is apt to take cold easily he should have

a little cold water dashed over his chest and spine, followed by a gentle but brisk rubbing to start up the circulation. Sun baths are also excellent to give such children. The baby should be placed directly in the sun, but with his back to it, so that the light will not hurt his eyes, for an hour every day. He should have all the fresh air and sunshine, both indoors and outdoors, that can possibly be given.

Gentle massage is an excellent thing for rachitic babies, and it should be given morning and evening. With the exception of cod-liver oil in small doses, and iron, if the baby is very anæmic, drugs do more harm than good. With patience and wise treatment rickets can generally be entirely cured.

EARLY SIGNS OF ILLNESS

When a baby persistently refuses his food, appears drowsy at unusual times, is fretful, feverish, and seems generally uncomfortable, a young mother is often puzzled to know what to do until her doctor can arrive. She should look in

the baby's mouth to see if it is sore and at his throat and tonsils to see if there is any inflammation, enlargement, or spots there. She should examine his body carefully for rashes.

The baby should be undressed and put to bed in a quiet room, apart from all other children, and if very hot and restless he should be given a sponge bath, with a tablespoonful of alcohol to a basin of lukewarm water. If he has not had a free movement that day he should be given a suppository or injection.

His usual food should be diluted with water or barley water to just one-half the strength it is generally given; if he is old enough to have any solid food, none should be given at this time. It is safe to give a teaspoonful of castor oil, but no other medicine should be given until the doctor arrives. A baby having fever will generally be thirsty, and he should be allowed plenty of pure water to drink. If the mother has a clinical thermometer, she should take the baby's temperature in the rectum.

CHAPTER THIRTEEN

THE FIRST HALF OF THE BABY'S SECOND YEAR

Mental and physical development. Nursery water cooler. The "Second summer." Eczema.

DURING the first half of his second year the baby makes rapid strides, both mentally and physically. He gradually adds more and more words to his vocabulary, but at this period of his life he makes frequent use of the sign language.

When he wants a certain object he will point at it, hold out his arms to be taken up, shake his head for "no," and nod it for "yes," shake a "bye-bye," "play pat-a-cake," and when asked where his eyes, ears, nose, mouth, etc., are he will generally point at the correct member.

At this time the baby will often take a keen

interest in bright-colored picture books which represent animals; frequently he will be able to tell the different animals apart, and make a different sound to represent each animal, as "bow-wow" for the dog, "moo-moo" for the cow, etc.

In the matter of mental development girls are apt to be a little more forward than boys. A baby girl patient of mine, when just thirteen months old, had trouble with her eyes; her mother kept the cotton which she used for the eye lotion wrapped in tissue paper. Although in another room, the minute this baby heard the rustle of the paper she would shut her eyes up tightly and begin to cry; showing that she fully understood what was coming.

This baby had a few spots of eczema on her face at about the same time; a lotion had to be sopped on the eruption several times daily; one day the baby took up her mother's handkerchief and gently touched each spot on both cheeks, exactly imitating her mother when she applied the wash. Whenever afterwards she

was told to "fix her spots" she would go through with the same performance.

A little boy just thirteen months old, and who could not yet walk entirely alone, picked up a piece of white cloth one day and began to dust the furniture just as he had seen the nurse do every day. As these examples show, children of this age are often very observing and imitative.

Babies at this period will also often express great joy at the sight of their hats and coats, or when the baby-carriage is being prepared for an outing. If the child can say "Pa-Pa," "Ma-Ma," or "Na-Na," he will frequently apply the words to every man or woman he sees, not yet realizing that Papa means his own father only, Mamma his mother, and Nana his nurse.

At this time babies often express a great interest in animals; while it is not wise to allow a dog to lick the baby's hands or face, or a cat to sleep near the child so that the baby catches the cat's breath, it is wise to encourage the baby's love of animals and early teach him to be kind

and gentle with them; it is very wrong to frighten the baby with threats of what an animal will do to him, or, indeed, to create a sense of fear in any way. A timid child has many a hard battle to fight in later life.

By the time the baby has reached his eighteenth month he usually has twelve teeth, having cut the remaining two lower incisors and four front double teeth or molars at some time during the interval between his twelfth and eighteenth month.

When he has reached his eighteenth month the normal child's fontanelle is quite closed; if he has rickets it often remains open some months longer. His average weight at this time is twenty-two and a half pounds, and he measures thirty inches long.

Between his sixteenth and eighteenth month the baby's dietary should be increased to meals arranged like the following sample diet:

6 A. M. Ten ounces of plain milk (not pasteurized).

8 A. M. The juice of half an orange, strained.

10 A. M. Two tablespoonfuls of well-cooked hominy, or else barley or oatmeal jelly, on which may be put a little top milk and a pinch of salt, and a cup of milk (about six ounces) to drink.

2 P. M. Four ounces of mutton or chicken broth, one scant tablespoonful of rare beef, alternating with two ounces of beef juice and a soft-boiled or coddled egg. With this meal he may also have a small piece of stale bread or zwieback, and for dessert a small saucer of prune jelly, apple sauce, a baked apple, or junket. It is not necessary to give milk with this meal, but a little water may be taken, if wanted.

6 P. M. Thoroughly cooked farina, cream of wheat or granum on which is a little top milk, and a pinch of salt, and eight ounces of milk to drink.

10 P. M. Ten or twelve ounces of plain milk, which may be given through a bottle, if preferred.

The beef should be prepared as follows: Take round or sirloin steak and scrape it with a large spoon on both sides, so that the pulp only is ob-

tained, salt it a little, and place it with a very tiny piece of butter in a saucer, cover it with another saucer, remove the cover of the boiling tea-kettle, and put the saucer containing the meat in its place; allow it to steam until just heated through; it must still look rare when done. Begin by giving the child one teaspoonful of this at a time, and gradually work up to a tablespoonful.

If the child reaches his sixteenth or eighteenth month in the middle of the summer, it is better to wait until cool weather before giving the meat.

The baby still needs plenty of water to drink between meals, and this should be boiled and cooled as it was when he was a young infant. The Acme water cooler is very convenient to have in the nursery. It consists of a glass jar which is placed in a double-walled japanned can; it has a cover and a handle, and water may be kept cool all night in it. It may also be used to keep things hot, for when placed in the jar they will remain hot for several hours; ice will

keep unmelted in this jar for a long time. The price of the article is $1.25, and it may be obtained at many large furnishing stores or druggists.

THE BABY'S SECOND SUMMER

Nearly every mother has been taught to dread the baby's second summer; often she does not know any particular reason for dreading it, but her own mother or else some neighbor has warned her that this is a critical period in the baby's life, and so she begins to fret and worry even before the hot weather sets in.

Now, when the baby is born at such time that he is cutting his double teeth at this season, and if the teething is attended by indigestion and fever, there is really some cause for anxiety, because during the hot weather the digestive organs are always more difficult to manage than during the cold months; otherwise, if the baby is fed properly, and with the same conscientious care as to regularity that he received during his early months, there is no reason why the second summer should be any more dangerous

than the first or any other during early childhood.

The mistake made by mothers, and even more frequently by grandmothers, is that of allowing the baby of this age to come to the family table and partake of the food intended for the adults. No matter if it is "only a little," it may be quite enough to upset the baby for weeks, and then his illness, which is in reality due to the parent's own foolishness, is laid to the credit of the "second summer."

Do not give the baby crackers, zwieback, or bread between meals; he should have nothing but water between his regular meal hours.

The baby of this age may wear in summer a thin gauze shirt with short sleeves, but under it should be still the ribbed silk and wool band, and he should also wear his flannel petticoat during the summer. The rules given in regard to cool sponge baths, and general care of the baby during his first summer, should be carefully followed now.

The advice given under the head of "Summer

Complaint" still holds good at this period of the baby's life, and should be faithfully followed if good results are to be expected.

ECZEMA

Eczema is one of the most tedious skin diseases with which a baby is troubled. Unfortunately it is not uncommon.

The causes of eczema are numerous; sometimes there is apparently no cause at all, and the case seems very discouraging and puzzling both to mother and physician.

Among the chief causes of eczema are: inheritance, improper food, and external irritation, such as rubbing from stiffly starched clothes or lying in wet napkins.

The disease is seen in several different forms; the most common among babies is usually that which is known as "weeping eczema." Here the skin cracks and shows a bright red moist or "weeping" surface, which itches a great deal. This is most often seen on the cheeks, forehead, and in the bends of the joints.

In treating eczema unless the salves, lotions, etc., that the doctor orders can be kept in place, and the child prevented from scratching the affected parts, very little good can be done. To prevent scratching, the child's hands may be tied into mittens which have no thumbs; even then the baby will often manage to rub the eruption; a better way is to bind pieces of cardboard onto the arms in the manner described in the fifth chapter. Special sleeves made of celluloid can now be bought for this purpose, and are excellent to use in case of need.

If the eczema is on the face the doctor will sometimes think it best to exclude the air and keep the ointment in close apposition to the parts by means of a mask. The mother will sometimes be called upon to make this mask and find it quite an undertaking unless she happens to know a simple way of making one.

The best way to make an eczema mask is to take canton flannel or heavy linen broad enough to reach below the baby's chin and up a little way onto the child's scalp and long enough to

reach completely round the baby's head and face and allow a considerable lap besides; now trace on a piece of tissue paper the position of the baby's eyes, nose, and mouth, and cut out holes in these positions, first on the tissue paper, and then, by putting the paper directly in the middle of the piece of cloth for a pattern, cut the holes out in that; next divide the ends of the cloth into three pieces, and cut them towards the middle of the mask to within about an inch and a half or two inches of the hole for the mouth. The holes may be button-hole stitched to keep them from fraying; then after the salve or lotion is put on the face the mask is applied, the two middle ends being brought together, lapped and securely basted or pinned with small safety pins, a little to one side so that the baby does not lie on the seam; next the two upper ends are brought down, crossed at the nape of the child's neck, then fastened on either side of his head; the two lower pieces are crossed at the nape of the neck and brought up a little way, and also fastened to the rest of the mask at the side of the

baby's head. When this mask is properly put on it makes the best possible dressing for a facial eczema. Sometimes it is called a "six-tailed bandage mask." It will take two people to apply the mask, for the baby must be held still while it is being put on, otherwise it will be crooked.

A case of eczema should be under the doctor's care, and he must judge in each case the advisability of restricting or changing in any way the child's diet; this often has a great deal to do with the successful treatment of eczema; oatmeal and foods containing much starch and sugar usually being particularly bad for such cases, while again other changes are necessary.

An ointment often used in cases of eczema is called "Lassar's Paste." In other cases an ointment containing tar is most beneficial, but the mother should not experiment on her own account; let the doctor decide what is best. Water and soap are often prohibited, and the parts are bathed in warm olive oil instead, or, if a large surface of the body is involved, a bran bath is

often ordered. To give this bran bath the mother should take a large cupful of bran, tie it up in cheese-cloth, and squeeze it about in the water until the water looks soapy or a little milky.

Sometimes when all treatment has failed the eczema will suddenly disappear of itself, the child apparently having "outgrown" it. This should not be trusted to, however; every means of treatment should be employed that the doctor advises.

CHAPTER FOURTEEN

THE SECOND HALF OF THE SECOND YEAR

Walking in the street. Go-cart robe. Protection of ears. Talking. Training in obedience, etc. Diet. Tonsilitis. Adenoids.

BETWEEN the eighteenth and twenty-fourth month the baby becomes much steadier on his feet than he has been before. He can now run quite fast and sometimes takes delight in running away from a person just for mischief. In summer, when the ground or piazza is dry, he may be allowed to walk out of doors for at least a short time every day. Do not let him grow tired, however; it is much better to keep the go-cart or carriage at hand.

A baby of this age is too young to walk in the

streets in winter. He cannot wear heavy enough shoes to really keep his feet protected from the cold, damp sidewalks.

When a go-cart is used instead of a carriage be sure to have the baby's legs well covered, so that the wind and dampness cannot chill him and so give him a cold. An excellent article for use in a go-cart is a large bag having a drawing string at the top. The baby should be put into this bag which will form a warm covering for the lower part of his body, and then the string should be drawn and tied under his arms. The air cannot possibly creep up under his legs if this bag is used.

The bag may be made of flannel, eider-down cloth, broadcloth, or felting, and may have the baby's initials embroidered on the front; or it may simply be made of an old crib blanket and then a small carriage robe may be placed over it.

A baby of this age must have his ears covered when out on very cold days. In the case of little boys some mothers object to the baby cap which has been worn up to this time by little girls and

boys alike; if so, "Tam-o'-Shanter" caps made of angora wool, and which can be pulled down over the baby's ears, are both pretty and useful. Ear muffs may be had for babies also, but are not very pretty to look at. If the mother wants her little boy to wear a soft felt hat, it may have rosettes of ribbon lined with flannel sewed onto the elastic, so that the ears will be covered by them.

The baby girl should wear a lined bonnet which will sufficiently cover her ears.

Babies of this age make rapid progress in learning new words; a child who hears other children of the family constantly prattle will often talk much earlier than one who lives among adults only.

Care should be taken to speak correctly and to use pure English when speaking to, or before, a little one learning to talk. It is surprising how quickly a baby of two years will observe and imitate defects of speech. A little two-year girl whom I knew had a nurse for a short time who had a cleft palate and hence talked in a peculiar

manner; only a few days after the child had heard this nurse speak, we noticed that she was trying to imitate the girl, and after a very few attempts she succeeded so well and persisted so in speaking in this manner that we had to put the child in charge of another nurse.

By the time the baby is two years old he will often form short sentences, such as "Go out now," "Down tairs quick," etc. If his father, mother, or nurse are away for a few days he will often seem to miss them and will be exceedingly glad to have them return.

Most children are very affectionate at this age and they should never be repulsed; a great deal can be done in teaching the child obedience and unselfishness if his affection is appealed to. If the child has been naughty and the much-loved mother looks grieved and hurt, baby though he may be, he will often feel very much ashamed and anxious to make amends by a lot of hugs and kisses. Sometimes he will remember the incident for a long time.

The baby should be taught to let things alone

that do not belong to him. At this time he is perfectly able to understand what is said to him about such matters, and he can be very easily trained not to touch things if the training is begun early. At first it will be necessary to say "No, no" gently but firmly and then divert his attention to something of his own that he can have to play with.

If this training is carried on consistently, the child will soon not think of touching what does not belong to him at least without asking permission.

Another thing that should be early taught a baby is willingness to go to bed at the proper time and without any fuss or unnecessary delay. I am acquainted with a family of four little children all under seven years of age, who have been taught from the time they could first toddle to instantly say good-night the moment the nurse put in an appearance at bedtime. Although they may be in the midst of a game even the baby will at once stop, bid good-night to all, go to the door where the nurse is waiting, and after mak-

ing a little bow or courtesy, happily go upstairs to bed.

Guests always remark on this good behavior, but the children themselves think nothing of it, for they have never known anything different. Indeed, one of the little girls, aged four years, when making a visit at the house of her little cousin who had not been so trained, looked at him in perfect amazement when he cried on the appearance of his nurse at bedtime, and privately told me afterwards that she thought it was "terrible for little P. to act so, but," she added, "I suppose it is because his mamma has not brought him up right."

By the time the baby is two years old diapers should be given up and little drawers used instead. The baby should be taught to make his wants known as early as possible, but no exact age can be given for this. Frequently it will be necessary to use diapers at night for several months longer, although, if the baby is taken up at 10 or 11 P. M., he will frequently go all night without passing his water.

If he has been properly trained, he will long ago have given up soiling his napkin; using his chair for his regular daily movement ever since his early babyhood.

The average two-years-old child weighs 26 1-2 pounds, his head measures 19 inches in circumference and his chest the same, his length is 32 1-2 inches. He has now sixteen teeth, having cut his four canine or "eye and stomach" teeth between the eighteenth and twenty-fourth month. At the age of two the baby should give up his 10 P. M. meal unless he has already done so of his own accord. The following is a sample diet for a child of two years:

7 A. M. A saucer of a well-cooked cereal (do not give cereals which require no cooking); a cup of milk to drink, a piece of stale bread on which is spread a little butter, or else thin dry toast and butter.

10 A. M. A cup of milk.

12 M. Saucer of chicken or mutton broth, tablespoonful of rare scraped beef or roast beef very finely cut up, or rare, shredded lamb

chop, a little macaroni, stewed celery or spinach, or rice jelly, zwieback with prune jelly, baked apple, apple sauce, junket or soft-boiled custard or occasionally a little vanilla ice cream for dessert. No milk is needed with this meal, but water may be given if wanted.

2 or 3 P. M. The juice of an orange.

4 P. M. Farina, oat or barley jelly and a cup of milk, a small piece of stale bread and butter.

7 P. M. Cup of milk after the child is in his crib. Twice a week a soft-boiled egg may be given in place of the meat. Then it is a good plan to give beef juice instead of the broth.

TONSILITIS

Tonsilitis is very common among children, especially in winter when there is much dampness from melting snow and when the weather is subject to sudden changes. Some children inherit a weak throat and are especially predisposed to the disease, having large tonsils and often adenoid growths as well; in such cases the

child seldom gets through the winter without several attacks of tonsilitis.

When the baby is too young to complain of a "sore throat," the first sign of trouble will often be fever and general languor. When the throat is examined the tonsils will look enlarged and very red, with usually little white or yellowish dots scattered over their surfaces. After the disease is well advanced these tiny spots frequently run together and look so much like a diphtheritic membrane that the doctor will have to examine a little of the exudate under the microscope, in order to determine whether the child has diphtheria or not.

The child's temperature is often as high as 103 or more; swallowing will be painful, and if he is old enough he will often complain of headache and a general soreness or aching all over his body.

The disease generally lasts from two days to a week, and while there is any fever it is much wiser to keep the baby undressed and in bed. If he is still taking milk diet only, the formula

should be weakened a little, as in all cases where there is fever, and if the child is old enough to take solid food this should be omitted while the temperature lasts, and gruels, broths, and milk be given instead. When fed in this manner nourishment should be given oftener (that is, if the child is used to solid food), the fluid diet should be given every two hours, alternating the above-mentioned articles of food. After the child is two years old a little vanilla ice cream (about a tablespoonful) may be given and will feel very grateful to the inflamed little throat. A little wine jelly may also be given a child of this age; it will slip down easily and at the same time prove beneficial on account of its stimulants, as the child is apt to feel weak after the fever.

Doctors differ much in their treatment of this disease, but all agree that the bowels should be made to move as soon as possible and at least once a day. I generally give citrate of magnesia for this purpose; for a child of two an ounce is often enough; if not, it may be repeated

every two hours until there is a free movement. I often swab the child's throat with tincture of the chloride of iron one part and glycerin two parts two or three times daily, and at intervals of two hours spray the throat with Borolyptol and water 1-5.

It is usually wise to give some form of iron internally, and I prefer the pepto-manganate as it does not injure the teeth, nor is it so apt to upset the child's digestion by making him constipated, as some other forms of iron are. I do not begin this iron, however, while there is fever.

When the child is subject to frequent attacks of tonsilitis and there is much enlargement it is much wiser to have the tonsils removed or rather clipped, for they are seldom taken entirely out. Chronic catarrhal deafness is often started by very much enlarged tonsils and adenoids, and it is not worth while to subject the child to this risk.

A child with any form of sore throat should be kept away from other children.

ADENOIDS

Adenoids are growths of tissue situated between the nose and throat. Nearly everyone has a growth of this kind, but when it becomes enlarged we then realize that it is there.

Children of all ages may have this enlarged adenoid growth, but it is most often seen in those between the ages of two and eight years.

A child having a considerable growth of adenoids will often have a discharge from the nose the greater part of each winter; he will seem to "catch cold" on the slightest provocation; he is usually pale, a restless sleeper, and often what his mother terms "a delicate child." When the growth is quite large the child is very apt to be a "mouth breather," keeping his mouth open night and day and often snoring very loudly at night. He is also subject to night coughing and sometimes to bed-wetting. To one accustomed to seeing such cases the facial expression is very typical. The child looks dull and heavy, in extreme cases almost like an idiot; his voice is thick and indistinct, and

very often he will be slightly deaf; if the growth is not removed, in all probability he will be very deaf as he advances in years.

The only successful treatment for adenoids is their complete removal. When performed by an experienced person, the operation takes but a few seconds and is attended with little, if any, risk to the child.

In nearly every case after the adenoids are removed there is the most marked improvement in the condition of the child. Sometimes, a few months after the operation one would scarcely recognize the little patient.

CHAPTER FIFTEEN

THE FIRST HALF OF THE THIRD YEAR

Books, music, and amusements. Clothing. Useful articles when traveling. Diet. "The milk habit." Burns, bruises, cuts, splinters. Poisoning and antidotes. The emergency basket. Medicine chest.

FROM the twenty-fourth to the thirtieth month many sentences and words are usually added to the child's vocabulary, so that by the time he is two and a half years old he can say almost everything. If by this time he does not talk at all, but still makes use of the sign language, there is some cause to fear that he is a mute.

At this age the child generally becomes much attached to his "Mother Goose," and will like to be shown the pictures and hear the rhymes. Some children are especially bright at learning

these rhymes and nearly all can repeat some of them, or when someone else is repeating them the child will be able to say the last word of every line by himself.

While it is very wrong to overstimulate the little brain, it will do no harm now to spend a quarter or a half hour every day in teaching him some of the little kindergarten finger plays and allowing him to have the early kindergarten gifts, one at a time, to play with. He will in this way learn to know his colors, and by and by to count, in a pleasant and natural manner.

If the baby shows the least interest in music it should be early encouraged; many children at this age carry a tune exceedingly well and take the greatest delight in singing to themselves. Eugene Field's songs for children are very pretty and the music is quite easily learnt. A collection of songs from *St. Nicholas* is also much appreciated by children, who, although they sometimes do not understand the words of the entire song, enjoy the pretty airs very much.

Elliot's "Mother Goose" is perhaps the best musical copy of this old favorite to select and should be owned by every household of little ones. Emilie Poulsson's "Finger Plays" are also fascinating.

It is not wise to teach children just before bedtime, when their little brains should be preparing for the night's rest. Choose the early morning or else the time directly after the morning nap for any instruction given, and never keep it up long enough to tire the child.

All children should know the delights of a sand pile. If possible have one in the back yard or garden, and let the little one play there to his heart's content. If there is no back yard, sand tables may be purchased for use in the nursery and little tin sets of sand molds to go with them. When one cannot afford a regular sand table a home-made wooden trough, or even an old tub, partially filled with sand may be used instead.

Expensive mechanical toys are entirely out of place in the nursery. A child soon tires of

them, and either wants to pull them to pieces to see how they are made to go or else will leave them neglected for some simpler toy. At Christmas it is always a good plan to put a few of the toys received then away and bring them out, one by one, at different times during the year. The child will enjoy them twice as much if this plan is followed.

Even at this early age the baby can be taught to pick up his toys or at least assist in doing so, when he is through playing with them. This habit of being tidy might just as well be formed now as later. Neither should the baby be allowed to willfully break his playthings nor tear his books. Accidents will happen of course, but it is very unnecessary for a child to be destructive.

Books containing horrible pictures and stories have no place in the nursery, now or later. Many a nervous child is kept awake at night by thinking of some ugly picture or story he has heard or seen during the day. It is here that ignorant nursery-maids do so much harm, fright-

ening the baby into good behavior by telling him some dreadful story, or that some monster will take him away if he is not good.

A little child's imagination is often very vivid, and we adults have no idea what he may have to endure through some thoughtless remark of ours.

Except for dress occasions or afternoon wear, white dresses will now usually have to be discarded. A little two-year-old girl may wear simple gingham dresses having a narrow white frill at throat and wrists and still look dainty. Little boys of this age now usually wear Russian blouse suits with short trousers, of colored gingham in the morning, and of some white material in the afternoon.

Tiny overalls, or "rompers," are now used a good deal for both boys and girls while they are at play. Children of this age should be put into night drawers, wearing cotton ones in summer and flannel ones, either with or without feet, in winter. Corded waists are also generally used at this time. It is better to have the little girls' waists made with a slight fullness,

and these can now be bought ready-made at a children's furnishing house in New York for fifty cents apiece or very plain ones for twenty-five cents.

When taking a long journey with a little child it is well to carry either a rubber cushion or rather ring, or else a small wooden seat which will fit onto the ordinary water-closet seat. Pretty baskets are now made which contain a small chamber and are exceedingly useful for mothers to take when traveling with young children. Many dreadful diseases are contracted by allowing children to use the public toilet articles.

The last four double teeth are now cut, completing the first set of twenty teeth.

Children aged two years and a half can usually do with three regular meals a day, but if they do not seem satisfied or stop gaining in weight on these three meals, the plan given in the last chapter should be followed until the baby is three years old.

The following plan is often used at this time:

7 A. M. The juice of an orange.

8 A. M. Saucer of a cereal, glass of milk, slice of stale bread and butter, and twice a week a soft-boiled or coddled egg.

12 M. Cup of mutton, chicken, or beef broth, very finely cut rare steak, roast beef, lamb, or lamb chop; once a week the white meat of chicken, tablespoonful of stewed celery, spinach, asparagus tips, macaroni or rice, or half of a well-baked potato; bread and butter, and for dessert stewed or baked fruit, boiled custard, junket, or once a week vanilla ice-cream.

5.30-6 P. M. A large cup of milk and well-cooked cereal, and piece of zwieback or milk toast.

So many mothers make a great mistake by giving their children potato among the first articles of solid food. Potato contains a great deal of starch and cannot be well digested by young children. It is best to wait until the child is two and a half years old before giving it at all, and then it should be very thoroughly baked and mashed with a fork, a tiny piece of butter and a little salt added.

"THE MILK HABIT"

Mothers frequently say their children will take nothing but milk and cannot be induced to eat solid food. Such children are usually pale and weak, and when they have any disease it goes hard with them. The only way to make them take solid food is to withhold all milk until the child is so hungry that he is glad to take anything that is offered to him.

In cases where the child will take only meat, or refuses meat and will take only broths and vegetables, or in fact where he persistently refuses any article of food that is considered necessary to his best good and proper development, he should be made to overcome his antipathy as early as possible. Usually the only way to do this is to wait until the child is hungry and then give him the disliked article, and nothing else until he will take it.

This is not "cruel treatment," but is for the baby's best good both now and later.

HOW TO CARE FOR BURNS, BRUISES, CUTS, ETC.

One of the most important things in treating a burn is to exclude all air as soon as possible. If the skin is not very badly broken, dust powdered bicarbonate of soda over the burnt portion of the skin and then wrap it up in perfectly clean linen. If the burn is more severe, olive or, better still, linseed oil should be put on, then a layer of clean linen and then a thin layer of cotton wool.

When the burn is at all deep or extensive the doctor should see it, for if it becomes infected it will prove a very serious thing. When the child seems much prostrated by the injury he should be made to lie flat and perfectly still if possible, while a little stimulants are given in hot water and hot-water bags are placed at his feet if they seem at all cold. Never put anything that is soiled near a burn; it must be kept as clean as possible.

For a severe bump or bruise, either something very hot or very cold should be applied as quickly as possible. A flannel wrung out of

very hot water, placed on the spot, and then changed often enough to keep it hot, will often help a great deal.

Ice may be wrapped in a little piece of cotton and then held on the injured place for a few minutes. After this the spot may be kept covered with a cloth wet with witch-hazel.

When a child has a slight cut all that is usually necessary is to wash it with clean cold water and tie it up in a piece of clean linen until it heals. If there is a discharge of matter, the wound should be dressed twice a day, keeping it wet with a solution of bichloride of mercury 1-5000, and a doctor should examine it at least once.

Some cuts will bleed very profusely; they should be allowed to bleed for a few seconds and then, if they do not show any tendency to stop, ice may be applied, or a pad of clean linen may be very firmly pressed on the wound and held there until the bleeding has ceased.

When there is bleeding from a large blood vessel a handkerchief or piece of linen should be

tied around the bleeding member and *above* the cut, then a stick slipped into the tied ends of the handkerchief and then very tightly twisted; this should be kept up until the doctor can arrive.

One can tell that an artery is cut when the blood comes in spurts and jerks and is bright red.

Splinters should not be allowed to remain in a child's flesh. They should be removed as soon as possible with a sharp, clean needle, and if the place seems sore it should be tied up in the above-mentioned solution of bichloride of mercury until it is well.

When a bone is broken the injured part will be perfectly helpless, and great pain will be present if it is touched. It should be kept as nearly as possible in its natural position until the doctor can arrive to set it. If the broken bone is in the leg it may be helpful to place it on a small pillow, which is tied about the leg until it can be set. The greatest care should be taken not to force the broken ends through the skin.

When the collar bone is broken the child's hand should be placed on his opposite shoulder and kept there by means of a broad sling or bandage until the doctor can arrive.

A dislocation should be attended to as quickly as possible, for it will usually swell very rapidly. The child should be kept very quiet until the doctor arrives, and if he seems in great pain, hot, wet flannels will sometimes relieve him if they are placed on the injured part.

POISONING

Accidents will happen in the best-regulated households, and sometimes a child will get hold of rat poison, fly poison, match heads, or something else a careless nurse has left within reach; then prompt action on the part of the mother is necessary, if the child's life is to be saved.

The general treatment for poisoning is to rid the stomach as quickly as possible of the poison taken. This is done by emetics, some of which are mustard and lukewarm water, a teaspoonful of alum in a glass of lukewarm water,

a little salt and warm water, or ipecac and then warm water.

When fly poison has been taken give half an ounce of olive oil in the same amount of lime water and repeat this every five or ten minutes for five or six doses, then give white of egg and keep the child very warm. If the doctor cannot come quickly go to the drug store and ask for freshly precipitated hydrated sesquioxide of iron, telling the druggist what it is wanted for, and give the child this in doses of about an ounce at a time as the oil was given. This is the antidote for arsenic and may be given whenever arsenic has been taken.

When matches have been sucked give a tiny pinch of sulphate of copper, or blue vitriol, dissolved in water, repeated every few minutes until the child vomits freely. Never give anything oily, as milk or egg, for this dissolves the phosphorus and so makes it more easily absorbed.

Sometimes oxalic acid that is kept for cleaning purposes will be taken by mistake for Epsom

salts; in such a case give lime in water and an emetic.

When carbolic acid has been taken, give the white of egg after the emetic and Epsom salts.

If an overdose of a soothing syrup or too much paregoric has been taken, keep the baby awake by almost any means, as slapping with a towel wet in cold water, or, if the child is old enough, walk him constantly up and down until the doctor can get there; an injection of strong black coffee is also often used with much benefit; when the doctor arrives he will probably give the chemical antidote.

After any poison has been taken it is well to give a dose of castor oil. The poisoned person should always be kept warm and given brandy or whisky, if the pulse is weak. When a trained nurse or a doctor is at hand the first thing they will usually do in a bad case of poisoning, will be to wash out the child's stomach, but the mother will hardly be able to do this herself unless she has happened to have seen it done some time before.

Another form of poisoning is that of poison ivy. Some children are so susceptible to it that they only have to be moderately near it to have the rash come out.

Bicarbonate of soda in water will often stop the itching and cool the heated and swollen part as well as anything. Connecticut farmers recommend a tea made of "poison weed," and frequently sopped on the eruption. I had occasion to try this once and found that it benefited the little patient very much.

The bowels should always be kept open when a child has the poison-ivy eruption, and after it is over it is often well to give some good preparation of iron, for a time, at least.

Every mother should have an emergency basket. It should contain a pair of scissors, absorbent cotton, old linen, adhesive and court plaster, several bandages, a little oil silk or rubber tissue, a pair of forceps, a glass syringe of some kind, and a paper of safety pins. This basket should be kept covered and in a handy place near the family medicine chest.

The medicine chest should be kept under lock and key. It should contain a small bottle of castor oil, olive oil, a box of boric-acid powder, one of bicarbonate of soda, one of plain and one of carbolized vaseline, a bottle of the extract of witch-hazel, a small vial of bichloride of mercury tablets, a small bottle of syrup of ipecac (which will have to be renewed every few months), a small bottle of glycerin, a bottle of whisky and one of brandy, a box of English mustard, a small box of cold cream, a clinical thermometer, medicine glass, dropper, soft rubber ear syringe, spoon, an eye stone, a pad and pencil, and labels. Hung near the chest and emergency basket should be the hot-water bag and fountain syringe, with the rubber catheter for use in irrigating the bowels. Patent medicines have no place in the household, and should not be used by the young mother.

CHAPTER SIXTEEN

THE SECOND HALF OF THE THIRD YEAR

Leggings. Children's parties. Home classes. Occupations. Weight and measurements. Diet. Bed-wetting. Retention of urine. Masturbation. Worms. Nail-biting. Mumps.

WHEN the child is two and a half to three years old he may be allowed to walk in the street for a little while each day, even in winter. When the weather is cold his legs should be well protected by warm leggings, and if the walks are at all damp he should wear small rubbers. Woolen leggings are warmer and better for such little tots than are leather ones.

The baby may now leave off his ribbed knit band and depend on his shirt for warmth over the abdomen.

If the child is an only one, it is well to invite a little friend in to play with him occasionally, so that he may learn to share his toys and play nicely with other children.

Avoid children's parties, however, as long as possible; so many children are made ill and overexcitable by these entertainments that it hardly seems fair to the child to run such a risk just for an hour or two of nervous pleasure.

It is so much better to have one little friend in to lunch or to spend the afternoon, while the child is young and easily excited.

Never allow the baby to have a hearty romp just before he goes to bed; these bedtime romps are often accountable for restless nights and the " night terrors " of childhood.

Many children will seem very naughty and mischievous at this age, when in reality they are not so, but simply need a little guidance in occupying their restless minds and fingers. It is a very bad plan to keep saying " don't " to a child. If the mother does her own housework she should allow the child to help her in little ways; if

the baby is a boy, it will do him no harm to assist about the house a little also. Perhaps the help given will not be very much real assistance, but it will start the child in the right direction and keep him busy and happy instead of in mischief. Children always love to "help," and will be perfectly delighted if they are given a towel and a few spoons to dry, or a duster and are allowed to polish off some of the furniture.

On account of the morning nap, which should be kept up until the child is at least four years old, it is better not to send him to the kindergarten at present. If a little class can be formed of children of the neighborhood, having a kindergarten teacher at one of the houses for an hour every morning after the child has had his third birthday, it will be an advantage and not too much of a tax on the little brain. This is very different from a regular morning session of school, which usually lasts from nine to twelve.

A piece of paper and a pencil will often keep

a child of this age amused for a long time. He will like to "write a letter" and to make believe draw things. A pair of blunt or rounded scissors should be kept on hand especially for his use, for he will enjoy cutting out pictures, and may safely do so if he sits quietly in his little chair and uses his own blunt scissors.

A three-year-old child usually weighs thirty-one pounds. His head measures about nineteen inches, his chest twenty inches, and his length thirty-five inches.

He should not wet his bed at night now, but should still be taken up at 10 P. M., for from seven at night to six or seven in the morning is a little too long for a child to go without passing his water.

When the child is three years old the following articles of food may be added to his diet: fresh, very well-cooked green vegetables, as green peas, lima and string beans, and squash; fresh ripe peaches, half a raw, scraped apple, corn starch, and, once a week, broiled or boiled fish.

Insist upon the child's chewing all his food thoroughly, not taking large mouthfuls, or eating hurriedly. He should never eat between meals.

He should be fed at regular meal hours, such as were advised in the last chapter.

It is better to give the milk warm, especially in winter. Do not give the child a liking for tea and coffee by putting "just a few drops" in his milk. If he does not know what they taste like he will not be so apt to form the tea and coffee habit a little later.

BED-WETTING

When the child is three years old, if he still wets his bed at night, some measures to stop this annoying habit should be taken. The child should be examined by a doctor, who will usually be able to ascertain the trouble and suggest a remedy. In the case of boys who are bed-wetters, the operation for circumcision will often effect a cure; again, the child may have pin worms, a stone in the bladder, some trouble

with his throat which makes him nervous and so unable to control the passage of his urine, or it may simply be due to habit. Scolding and punishing rarely, if ever, do any good. The cause must be found and the proper remedy applied. One thing the mother may do, and which sometimes helps, and that is to give no fluids after four in the afternoon. The child will have to do without milk or water for his supper and have bread and a dry cereal instead, with a little stewed fruit of some kind.

Atropine in increasing doses will very often control the trouble if there is no local irritation of any kind, but this is not a safe thing for a mother to give; the child should be under the eye of a physician while he is taking the drug. Occasionally a tonic will do much to stop the bed-wetting. It is generally a very tedious thing to treat, and may take months, or even a year, to get completely under control; the mother must, therefore, have a large stock of patience, and heartily co-operate with the doctor, if she expects to have a final cure made.

RETENTION OF URINE

Sometimes from no apparent cause the child will not pass his urine for a whole day at a time, or even longer. The mother may, in such a case, wring out flannels in very hot water, and place them directly over the child's bladder, changing them often enough to keep them very hot, and keeping this up for about fifteen minutes, unless the baby passes his urine before this time is up. Sometimes when the hot flannels will not help, first a hot cloth and then a very cold one will prove effectual. If this simple method does not make the child urinate, there is often something wrong with the organs or other parts, and a doctor should be summoned at once, for it may be necessary to use a catheter.

MASTURBATION

Of all the habits of childhood this is the worst and should be checked at the earliest possible moment. Masturbation means playing with or rubbing the genital organs. It is really a disease, and punishments are rarely of any use.

The child should receive medical aid, and as soon as possible, but the mother will have to be constantly on the watch, especially when he is going to sleep. It is often a very difficult thing to break up, and the earlier one begins the better for the patient.

WORMS

A great many of the ills of childhood are attributed to "worms," when they are really due to quite different causes. Worms are not half so common as most mothers suppose.

Unless the worms are actually seen, it is almost impossible to be sure they are present. Picking the nose and grinding the teeth are really not signs to be at all relied upon. Under no consideration should the mother give her child "worm medicine," just because she suspects worms. There are usually very powerful drugs in these remedies, and it is very wrong to subject the child to their influence when it is not necessary.

When a child really has round worms, the

doctor will generally order no food for several hours, and then give the proper drug, followed by a cathartic; when the worms will nearly always be expelled before long. In the Babies' Hospital we once had a child two years old who passed over seventy of these round worms within a few weeks; this child was very ill and had a number of convulsions.

Another variety of worms is the pin worm. These frequent the lower part of the rectum, and usually cause a great itching and sometimes a burning sensation about the parts. They can be frequently seen by the mother.

An injection of lime water will often prove very helpful in cases of this kind.

Tape-worms are very rare in children, and unless a piece of the worm is passed, it is very difficult to make the diagnosis. Never give the advertised "tape-worm cures." If a piece of the worm is passed, save it and show it to the doctor, who will prescribe the proper treatment.

Children who live in the country and are

"dirt eaters" are the most frequent victims of worms.

NAIL-BITING

Nail-biting is one of the most frequent bad habits to which children are subject. Like all such habits, it can be corrected much more quickly if taken in time and not allowed to run on until it has become very firmly established.

The mother may first try putting mittens or little bags on the child's hands; if this does not help, dip his finger tips in a solution of aloes or quinine. Bitter though these drugs are, some children do not seem to mind them, and then the only thing left to be done is to prevent the child from getting his hands up to his mouth in some way. The pasteboard splints already mentioned in an earlier chapter should next be tried, and if these do not prove satisfactory the celluloid sleeves must be resorted to. Sometimes it will take a long time to break up this habit, but the mother should persist, and so spare the child the shame and annoyance of badly appearing finger-tips in later life.

MUMPS

Mumps is a disease more frequently seen in children over four years old than in younger ones, although even a baby may take the disease, if he is exposed. It is very doubtful if mumps can be carried by a third person. For a child to take the disease it is usually necessary for him to come in direct contact with the person already affected with it.

The period of time necessary to elapse before the exposed child may come down with mumps varies considerably. Usually from two to three weeks from the time of the first exposure are required for mumps to develop.

Either one or both sides of the neck may be involved. Most often the swelling is noticed first on one side, and then, after a few days, on the other side. The first symptoms are often some fever, loss of appetite, and general languor. The mother generally makes her diagnosis when the child has pain on opening his mouth, and the swelling has begun. If anything acid, as lemonade or vinegar, is taken

into the mouth, the pain will often be very severe.

The swelling seen is in the parotid and sublingual glands, and hence is noticed behind, in front of, and under the ears. This swelling is at its height after two or three days, then it begins to grow less, disappearing entirely after a week or ten days at the most.

The child should be kept in bed, and his food diluted or made a fluid diet while there is any fever; his bowels should be kept open, and flannels wrung out of hot water may be kept on the swollen parts, thus sometimes giving a little relief.

In boys the testicles may swell and prove quite painful, but other complications are not very common.

CHAPTER SEVENTEEN

THE FOURTH TO THE SEVENTH YEAR

Weight and measurements of average normal children. Second dentition. Kindergarten. Gymnastics. Care of eyes. Food. Lice in hair. Ringworm. Chapped hands. Bronchitis. "Growing pains."

THE care of a child after he has passed his third year is not quite such a serious problem as it has been during his earlier years; there is still, however, much for the mother to do in regard to the child's training, both mental and physical, and a few words of advice regarding these subjects may not come amiss.

The following measurements, taken from Dr. L. Emmett Holt's little book, "The Care and Feeding of Children," show how the average child progresses physically at this time:

Four years—	Weight	35 pounds
	Height	38 inches
	Chest	20¾ "
	Head	19¾ "
Five years—	Weight	41 pounds
	Height	41½ inches
	Chest	21½ "
	Head	20½ "
Six years—	Weight	45 pounds
	Height	44 inches
	Chest	23 "
Seven years—	Weight	49½ pounds
	Height	46 inches
	Chest	23½ "

If the child seems to be perfectly healthy, once a month is often enough to weigh him now, and he may be weighed in his clothing, if more convenient. The above weights are in ordinary house clothes. Girls usually weigh about one pound less than boys of the corresponding age.

When the child is six years old the mother may expect at any time to see the little teeth, which composed the first set, gradually drop out, being replaced by the second set of teeth. In this second set there are thirty-two teeth, which often appear in the following order, given by Forchheimer and Dr. Holt:

First molars	6 years
Incisors	7–8 "
Bicuspids	9–10 "
Canines	12–14 "
Second molars	12–15 "
Third molars	17–25 "

The teeth of the first set become loose of their own accord and then drop out, or if they are so loose as to make the mother fear the child may swallow them during the night, the teeth should be drawn. Unless absolutely necessary, however, it is better to let them drop out of their own accord, for if drawn too soon the jaw may shrink, and so crowd the new teeth as they come in, and cause them to be crooked.

When there is any tendency to crooked teeth the child should be taken to a good dentist and the teeth straightened as soon as he thinks it advisable. If there are any cavities in either the first or second set, they should be filled as soon as seen. Some reliable tooth-powder should now be used on the toothbrush at least once a day. The teeth should be brushed in the vertical as well as in the horizontal position, and

the mother should see that this is faithfully attended to.

Sometimes the child will suffer considerably when cutting the second set of teeth, but they are not so apt to cause trouble as were the earlier ones. The wisdom teeth are sometimes so troublesome that the gum has to be lanced.

The child should still keep early hours, going to bed at seven or at the latest at eight o'clock. It is not necessary for him to take a nap every day, but in summer it is wise to take off his clothing during the very heated part of the day and, putting on the nightdress, have him lie down for about an hour; if he goes to sleep, so much the better.

It is often more convenient to give an older child his bath just before bedtime than in the morning, and there is no objection to this way, if the mother prefers it. The bath should be just lukewarm now, as in earlier life. When this tub bath is given at night it is well to sponge the upper part of the body, at least every morn-

ing, with cold water. This will often keep the child from catching cold easily.

Children should not be allowed to race about in their night-drawers and bare feet; when they are obliged to be out of bed for any purpose after they are undressed, they should wear little wrappers and bedroom slippers.

When the child is four years old he may be sent to the kindergarten for a half-day session, and when he is six he may begin to go to a little primary school for three hours in the morning. He should not be allowed to do any studying at home, however; he needs all the rest of the time for out-of-door exercise and play.

For a city child regular exercise by means of gymnastics is almost indispensable. These exercises should be guided by a competent teacher, and should consume part of the time given up to school work.

If mothers were more particular about insisting upon these gymnastics, there would not be so many round-shouldered children.

Nowadays a great deal of attention is being

paid to the care of school children's eyes, proper position of the desks in regard to the light, etc., but at home these same children are often allowed to read in a very poor light, or to read when they are lying down, or for a very long time together.

It is a mother's duty to see that the child's eyes are not strained in this manner. When he is reading at home he should always have a good light; it should be at his back, falling onto his book over his left shoulder. Every little while he should be made to rest his eyes for a few moments, and not read steadily for an hour or more at a time. Neither should he be allowed to read while lying down, for this is a greater strain on the eyes than most people realize.

If the child seems to hold his book nearer or farther off than most people do, the mother should try to correct this habit, and if he cannot really seem to see when his book is held in the normal position, he should at once be taken to an oculist and an examination made of

his eyes. If he is found to be near- or far-sighted he should be fitted to proper glasses at once.

Children should invariably have three regular and nourishing meals every day; they should not be allowed to eat candy, cake, or, in fact, anything else between meals.

They may eat any nourishing, easily digested food, and drink plenty of milk and water. They should not eat pork in any form, rich poultry, or game, gravies, any fried vegetables, or, in fact, anything else that is fried, unripe or decayed fruit, bananas, nuts, pastry, rich cake, nor griddle cakes, raisins, nor the seeds of grapes. They should never be allowed to drink tea, coffee, chocolate, beer, nor any form of wine, unless it is ordered especially by a doctor.

It is not absolutely necessary to prohibit all candy, but when it is given it should be either with, or just after, dessert, and only in very moderate quantities. Under no consideration should chocolate candy be given. Many mothers say, "Chocolate is said to be so nourishing, why cannot I give it to my child?" It may be nour-

ishing for an older person, but it is far too rich for a child's delicate organs to digest. When they must have candy let it be either molasses, peppermint, or pure barley sugar.

When a child has a very decided dislike for milk and it seems to disagree with him, if he needs something warm to drink, he may have cocoa made from the shells, never rich chocolate. The water given need no longer be boiled, if the water supply is a good one; ice should not be added to it, however. In summer, when it is wanted cold, it may be placed in bottles on the ice.

When children go to a public school they often contract lice in their hair, and the mother will sometimes be much puzzled to know how to get rid of these vermin. The following wash is very good to use, especially where there are many nits. It is very poisonous, and it should never be allowed to get into the child's eyes, for it smarts badly.

R	Tincture of larkspur	2	ounces
	Alcohol	2	"
	Ether	1½	"
	Acetic acid	1	dram

This should be put on the head and scalp at night, then the hair and head tied up in a cloth; the next morning the hair should be very thoroughly combed with a fine-tooth comb. Sometimes this treatment has to be repeated several nights before all the lice and nits are removed.

RINGWORM

Ringworm is another thing likely to be contracted by children after they begin to go to school. It is most often seen on the head, but may come on other parts of the body. It is a round red mark, varying greatly in size, and is really a little fungus. If it occurs on the scalp, or where there is any hair, the hair must be cut off very short, or else shaved before the treatment is begun. The disease destroys the hair to a considerable degree, but it generally grows in again. The spots may be painted with tincture of iodine, using a camel's-hair brush, and painting in a circle just beyond the outer part of the ringworm.

Children should not be allowed to wear each

other's hats and caps, for it is in this way that ringworm is often spread.

CHAPPED HANDS

So many children really suffer with chapped hands that the mother is sometimes at a great loss to know what to do for them. Rose water and glycerin often will help more than anything else. One-fourth glycerin and three-fourths rose water is the proportion usually used. It should be thoroughly rubbed into the hands after every time they are washed, and a supply put on at night just before going to bed. Sometimes, when this will not help, mutton tallow will do some good. The tallow is melted a little and then rubbed into the hands at bedtime, when old gloves may be worn all night.

BRONCHITIS

Bronchitis is a disease to which children of all ages are more or less subject. It often begins as a heavy cold, which goes on from bad to worse,

until bronchitis, and then even pneumonia, may develop, if prompt measures are not taken to stop its course.

It very often is a complication of measles.

The usual symptoms are a cough and a "wheezing" in the chest. This sound may not only be heard, but it may also often be felt by placing the hand against the chest wall. There is frequently quite a fever, and the child may seem very ill.

The early application of the mustard paste does more than anything else to break up an attack of bronchitis. The paste should be made as described in the third chapter, and left on the chest, both back and front, long enough to redden the skin well. It may be repeated as often as every three hours when there seems to be much difficulty in breathing.

Inhalation of steam is another excellent thing to do for a child with bronchitis. If the mother does not possess a regular croup kettle, use the tea kettle as was advised in the section on croup. When a croup kettle is at hand, however, a few

drops of pine-needle oil placed on its sponge will prove beneficial.

The child should be given a light diet and kept in bed until all fever and wheezing have disappeared. If every attack of bronchitis were treated promptly, there would be far fewer cases of pneumonia. A doctor should have charge of the case, but until he can arrive the mother will do no harm by applying the mustard paste and giving the inhalation of steam herself. She should not beg the doctor for medicines for the cough; sometimes they may be needed, but in the great majority of cases they do more harm than good, especially if the baby is a young one. Trust to the steam for relieving it.

"GROWING PAINS"

When a child complains of pains in his legs or other parts of his body the mother usually thinks he has "growing pains," and does not pay much attention to them.

Now, in children over four years old, these

pains often denote rheumatism, and the child who frequently complains of them should be taken to a doctor for proper treatment.

Heart disease very frequently follows rheumatism, and it is not a thing to be taken lightly.

CHAPTER EIGHTEEN

BACKWARD CHILDREN

Backwardness due to illness, rickets, lack of mental development, cretinism. School. Home training.

IF the young mother is acquainted with the normal development of an average child she will be better able to recognize any abnormality, either mental or physical, that may be present or develop in any of her own children. When she recognizes the trouble early, she will then be able to devote her energies to its correction, or at least, improvement.

There are many kinds of backward children, and it is not possible to go into all the different causes and varieties of backwardness in this little book, but if the mother sees that her baby makes no attempt to hold his head erect, stand, walk,

sit alone, smile, show recognition of her or his nurse, talk, or, in fact, to do any of the things mentioned in the preceding pages for a normal child to do at certain ages—if he seems to be months behindhand in all those things that show the child is developing properly—then she may know that he is a backward child, and that she will have to give him especial training, which will require an unlimited amount of patience and perseverance on her part.

Sometimes a child who has been up to the average in development will lose a great deal of ground by a prolonged illness; he may have walked very well before he was ill, but when able to be again up and about he may seem to have forgotten all about it, and have to begin to learn all over again.

Children who have rickets are very often backward in many respects, but will later catch up with other children, at least to some degree.

The above two forms of backwardness are the most hopeful types; those which depend upon some abnormality of the brain or nervous sys-

tem are not so apt to show such marked improvement, although much is often accomplished by careful teaching.

Sometimes children who are backward mentally are also the victims of a very violent temper, which they seem totally unable to control; they are also often vicious, and even cruel, to animals. Such children will generally do better if they are put under the care of a stranger who, while being always kind, will, at the same time, be firmer than the average mother is capable of being.

Backward children should have the best possible hygienic surroundings; if it can be arranged they should live in the country, and be out of doors as much as possible; they should eat wholesome, easily digested food, and have plenty of sleep.

The companionship of other children is often invaluable to a backward child, as he will then gradually learn to imitate what he sees the other children do. An English writer claims that it is better for a backward child to associate with

children considerably younger than himself, because if he is thrown with children of his own age he is apt to become discouraged in his often fruitless efforts to keep up with them in either their work or play.

In some cases the child will do much better if he is sent to a good school for backward and feeble-minded children. There is such a school in a little New Jersey town, which I have often visited, and the work accomplished by the pupils is really wonderful, and they all seem to enjoy it so much and to be so happy. Many of these same children were looked upon at home as almost hopeless cases.

If the mother must be her child's only teacher she must be always on the alert for a gleam of intelligence, and ready to encourage it to the best of her ability. She should provide herself with kindergarten gifts, and study as much as she can into the kindergarten methods.

Such children will sometimes take more notice of brightly colored objects than of anything else; they are also very frequently fond of music,

and can be taught to keep time to the music with their hands, or by marching, and sometimes they can even be taught to do some simple gymnastic exercises to the accompaniment of the piano.

Whatever their occupations are, they must be changed very frequently; otherwise the child's attention cannot be held.

In teaching a backward child to walk, the baby tender will often be a help. I once had a little patient over two years old, who had never made any attempt to walk; after several months' use of the tender he gradually learned to take steps, and then to walk without its use. When it is first used, however, the child must be left in it only ten or fifteen minutes at a time.

It will frequently be very difficult to teach a backward or feeble-minded child to swallow solids. When it is time for the child to have solid food the mother will find it wise to begin with something that will slip down easily, such as junket, a little jelly, or very soft milk toast. When the food is put into his mouth the child will often either let it slip out again or else roll

it about with his tongue in a perfectly aimless fashion, and it may take months to teach him to even swallow a piece of bread. Do not give up, however; some day he may very unexpectedly begin to chew, and then to swallow the food.

In the case of a very backward child, the faintest gleam of intelligence or of improvement in any way should encourage the mother to fresh efforts, for it is only by very short steps that a child of this kind can progress at all, so that the faintest sign of awakening brain power should be hailed with delight.

There is one variety of backwardness called "myxœdema," or "cretinism," which can be greatly improved, and sometimes cured, by the use of a medicine called "thyroid extract." This should always be prescribed by a doctor, and the child should invariably be under his care while the medicine is being taken, for symptoms may develop which the mother will not notice, and which may prove very serious to the child, if allowed to continue.

The mother will not be able to recognize this form of feeble-mindedness herself, but nearly every doctor is able to diagnose the disease after an examination has been made; so, as every mother of a backward child is naturally anxious to do all in her power to help him, she should have such an examination made, and if the disease is found to be present the treatment begun as early as possible.

CHAPTER NINETEEN

APPENDIX

Proprietary foods. The baby's first wardrobe, home-made and ready-made.

NOTWITHSTANDING all that has been written and said about the great advantage of properly modified cow's milk over any and all of the proprietary infant foods on the market we still find mothers, and alas! some physicians, making use of these foods as a steady diet for infants, and we are also very frequently called in to treat a baby suffering from rickets or scurvy, the cause of which can be directly traced to the prolonged use of one of these foods.

When the child cannot be nursed by his mother the next thing to do is to find something as nearly like the food Nature intended for the baby as possible. Now, none of the proprietary foods contain the ingredients which are found

in mother's milk in anywhere near the same proportions, and some of the ingredients are altogether absent.

While cow's milk, modified properly, cannot be made identical with mother's milk, it can be made nearer to it than anything else that has as yet been discovered.

There are no doubt some children who appear to thrive on proprietary food, but this is most often due to the fact that the food is made up with milk and water, and it is on these that the child is really thriving, and not on the food.

As in everything else there are a few exceptions that prove the rule, but to bring a baby up entirely on a proprietary food is a risk to which no mother should subject her baby for any length of time.

These foods have their uses in cases of temporary need. As many of them contain little fat they may be used in cases of illness, where the child cannot bear fat in any form. Some of them contain considerable malt sugar, and

this is useful to add to milk when the child is constipated. Others can be made up with water only, and so may be used when the mother must take a long journey with her baby, where it is impossible to obtain fresh milk, or to keep the milk prepared at home. In cases of acute diarrhœa the flour foods made up with water only are sometimes very valuable, for at such a time milk acts as a poison, and it is necessary to find a temporary substitute.

The following is a list of some of the best-known proprietary foods now on the market: Condensed milk, Mellin's Food, Horlick's Malted Milk, Nestlé's Food, Imperial Granum, Just's Food, Carnrick's Soluble Food, Ridge's Food, Peptogenic Milk Powder, Lactated Food, Eskay's Albumenized Food, and Cereal Milk.

When a child is very constipated one or two teaspoonfuls of Mellin's Food added to each bottle of his usual formula of modified milk will often help make his bowels move regularly without the use of any medicine or injections, etc. But this should not be continued for an un-

limited length of time. As soon as the bowels move regularly the proportion of Mellin's Food should be gradually diminished until, after four or six weeks, if not before, the child can do without this help.

Condensed milk and Malted Milk can both be prepared by the addition of hot water only, and so are among the best to use when taking a long journey. Begin to give the baby one or two bottles a day of the food selected a week or two before the journey is to be taken, so that his stomach may become accustomed to the change of food, and so avoid an upsetting on the train. These foods should be discontinued at the journey's end.

Imperial Granum is often excellent to use in cases of acute diarrhœa when no milk can be given. The proportion suitable for the baby's age (as given on the box) is mixed with a little cold water into a smooth paste, then added to a pint of boiling water, and boiled for fifteen or twenty minutes.

Peptogenic Milk Powder may be used for

a short time during or after an acute illness. It is added to the formula as directed on the package, and renders the casein of the milk more digestible. As the baby grows better the powder should be left out little by little until he can do without it entirely. If continued too long it sometimes renders the stomach unable to digest milk which has not been partially predigested.

These are the foods which I most often resort to in time of need, but I do not allow the child to go entirely out of my care, or consider that he is in a normal state of health, until he can do without these foods, and again take his modified milk without any such aids.

THE BABY'S FIRST WARDROBE

So many young mothers are at a loss as to what to prepare for the little stranger that they may find a few suggestions on this subject helpful.

If the mother can sew she will usually prefer to make many of the little garments herself, for

they will then be less expensive and more neatly made than if bought in the shops.

If the mother needs patterns she will do well to send to a reliable firm, as Butterick's, for an illustrated catalogue, and then select her patterns from this.

The baby will usually need the following number of articles:

Four to six dozen diapers (cotton bird's-eye).
Four to six shirts (wool).
Six flannel skirts.
Two white skirts (nainsook).
Four to six nightdresses (flannel).
Six day dresses.
Two wrappers.
Six pairs of socks.
Four to six flannel bands.
Two flannel sacks.
Two shawls or afghans.

The dresses to be worn, after the first four or six weeks, and the cloak and hood, may be prepared either before the arrival of the baby or else, as some prefer, afterwards.

To give the mother some idea of what a ready-made wardrobe costs, I give this list from a children's clothing house in New York:

Three flannel bands at 19 cts.	$0.57
Three cashmere shirts at 55 cts.	1.65
Three flannel barrows at 50 cts.	1.50
Two flannel skirts at 85 cts.	1.70
One feather-stitched flannel skirt	1.25
Two nainsook skirts at 45 cts.	.90
One nainsook skirt	.85
Three night slips at 38 cts.	1.14
Two day dresses at 62 cts.	1.24
One day dress	.75
Two day dresses at $1.00	2.00
One day dress	1.35
One worsted sack	.55
Two pieces of diaper at 55 cts.	1.10
Three pair of socks at 20 cts.	.60
	$17.15

Of course, other more elaborate and expensive outfits can be obtained, if desired.

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